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REPLY

TO THE

"STATEMENT OF THE TRUSTEES"

OF THE

98272

DUDLEY OBSERVATORY,

BY

BENJ. APTHORP GOULD, Jr.

ALBANY:
PRINTED BY CHARLES VAN BENTHUYSEN.
1859.

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PREFACE.

The length of the present Reply may, in many cases, prevent those from reading it, who have read the attack to which it is an answer. Yet it has been impossible to unite brevity with a complete refutation of the diverse calumnies that have been heaped upon me with such ingenious method and adroit complication. The time which has elapsed during its preparation has occasioned deep regret; but it is no matter of surprise to those who are aware that my regular duties have gone forward meanwhile, and, until the present month, without interruption.

The manuscript of this book was nearly complete, and a considerable portion of it was in type, when, on the 3d of January, I was driven from my dwelling by a hired band of rioters, acting without form or pretence of law,—a mere brute force, which left me no other choice than a passive endurance of the high-handed outrage, or an employment of similar agencies for protection in my position. The confusion into which my papers, books and affairs were thrown, the many and serious domestic and personal embarrassments connected with this sudden expulsion in the midst of a inclement season, and the many means of annoyance since devised a attempted by Mr. Olcott, have combined to delay the volume abor month, and have entailed the necessity of re-writing some portions of

No other apology for its lateness will be deemed necessary when mentioned that during the whole period,—from my removal to the O tory in February, 1858, until my forcible expulsion by Mr. marauding party during the present month,—the independent off upon which my subsistence depends was regularly prosecute more than enough to consume all the working hours a man the laws of health that the Astronomical Journal, under m been kept u gh unfortunately at greater intervals be cessive number than would have been the case had my me been otherwise unimpaired; that I have maintained all t by an extensive and laborious correspondence at home the Observatory work, of itself enough to exhaust e has been industriously and conscientiously prosecuted amid constant interruptions from the necessity of a

deputy, as exhibitor of the establishment during the whole period,—this service demanding for many months the whole time of one person during the hours of daylight. To all this I must add that, openly since May 22, and covertly prior to that time, no effort of Messrs. Olcott and Armsby has been spared to annoy and persecute me;—the public press teeming with calumnies and invective, instigated by them, leveled not only at me, but at every man who has had the spirit or the justice to take ground publicly in my defence, and accompanied by the ceaseless endeavor to excite obloquy and popular odium against every public work in the guidance of which any of my supporters have any part. It has been in the midst of the ceaseless labors, the physical exhaustion, and the unparalleled annoyances here indicated, that this Reply has been prepared.

Let no man say this is a private and personal quarrel; or that the matter is one with which he has no concern. If I am "crushed" in this controversy, it will be because I am not heard in my own defence. If I am crushed, then any man in the community may to-morrow be overwhelmed and borne down by a similar torrent of falsehood and undeserved obloquy. *Hodie mihi; cras tibi.* This "quarrel," fastened upon me, concerns every good man, every man who has a character to lose. It will be seen to concern the intellectual progress of our country; to concern every scientific establishment in the land.

I know not what may be the next movement of my malignant and unsparing persecutors. Since I was driven from the Observatory, they have not hesitated to publish and circulate the false charge that the buildings were found in a state of disorder, and the costly instrument exposed to the weather and already seriously damaged. They have actually commenced a legal prosecution upon the false pretence that the property of the institution had suffered damage while in my keeping; an accusation which I am fortunately able to prove as totally and maliciously false as any one of those related in the present volume. New engines of calumny and torture will doubtless be found by my assailants. But I think myself entitled, by the full expositions of these pages, to call upon my fellow-citizens for protection against new assaults, of the savage nature of those to which I have already been subjected. God knows I have borne enough at the hands of these wicked men, whose characters will be sufficiently evident from the following pages. By issuing their so-called 'Statement' in unlimited numbers, and by giving it a circulation almost unequaled in extent, their command of money has enabled them to imprint their falsehoods and misrepresentations on the very history of the times. It is not impossible for me to publish this, my defence, in such an edition, as to disseminate it over such a field. But I can and will place it upon record, that my Accusers may stand exposed in their true colors to all who may read it in this and future years, and that all their calumnies, now and hereafter, may meet with never-failing disbelief.

My only object in life is, and has been, to serve my country and the world, by devoting whatever abilities my Maker has given me, to the study and pursuance of one of the noblest subjects of human research. With a character heretofore unimpeached, and a course of conduct which shrinks from no investigation, I solemnly claim, upon every principle of justice and humanity, that, should I disregard future slanders, my silence shall not be misconstrued; and that my life shall not hereafter be spent in the wretched labor of defending myself against new attacks of these men, who, without one excuse for their malice, are determined upon my ruin, and who insist upon making the public a party to the sacrifice.

BENJ. APTHORP GOULD, Jr.

ALBANY, 1859, January 27.

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PART FIRST.

CHAPTER I.

PRELIMINARY.

Throughout the series of violent and almost unparalleled attacks of which I have for several months been the object, and in the course of which my moral, intellectual and social character have been assailed with a bitterness and persistence such as are rarely seen, it has been my endeavor to preserve a becoming silence, until a period should arrive when no man of spirit could doubt that it was my duty to present my own story to the public. In the mean time taste, judgement, and inclination have alike prompted me to remain silent. Priceless as his good name is to one who neither has nor seeks other possessions, I could not enter the lists to rebut such charges, and coming from such accusers, as those published by Mr. Olcott in July. The event proved this faith and this judgement to have been correct,—and the very enormity of the attack tended to render it harmless. The quick sympathy of my colleagues, Professors Henry, Bache and Peirce was aroused; and—though their sense of duty led them to investigate the charges against me with the fearless impartiality, which I courted,—the simple examination of the case excited their indignation to such an extent that the fulfilment of their duties as judges rendered them at once champions and defenders. The citizens of Albany, in a crowded public meeting, expressed their sympathy, their confidence, and their regard, in words and resolves, the memory of which has sustained and supported me, and for which I may not attempt to speak my gratitude.

Strange as it may seem, the reaction was greater than the action, and I soon became conscious that the assault had but added to the number of my friends and supporters.

Seven weeks later, on the 21st day of August, appeared a pamphlet entitled, "*The Dudley Observatory and the Scientific*

Council—Statement of the Trustees." It is a book of 173 pages,—mostly drawn up, and entirely revised and prepared for the press, by the cunning hand of a sharp lawyer. It is a laborious effort to take from me all that an honest man most values on earth, all that renders life worth possessing, all that might keep my memory fragrant when I live no longer.

Though springing from the same source as the first attack its character is totally different. It bears to it the same relation that the stiletto bears to the bludgeon. It is a skilfully fashioned weapon, wrought with cunning art, to accomplish by ingenious legerdemain what could not be attained by manly prowess. Had it been prepared by an unscrupulous trickster, ready to sacrifice not only another's good name, but even his own, for gain, its character would not have been very different from what it is. It was not written by the man who penned the first attack, but by his agent. What his pen could not prepare, his purse has procured;—namely, an impeachment of my character and course, capable of finding credence with honest, sincere men.

The language which I have used is strong; but could the naked truth be placed, in all its simplicity, before those who have read this savage attack, I believe that no power on earth could restrain the storm of indignation which it would arouse. Only after the lapse of an entire month did the atrocity of its policy dawn upon me. Its strength is in its boldness and enormity. What reasonable man will believe, amid such an avalanche of accusations, that all of them are destitute of truth? The very fact of a denial of all would operate to the disadvantage of the defendant. Among such a multitude of missiles, some at least must take effect. And what reasonable man would suppose for an instant that nine apparently responsible persons could be found, who would venture publicly to bring or sanction such grave and flagrant charges, when each and every charge was not merely false, but susceptible of full and entire refutation. Against this difficulty it is my lot to contend; and in addition to all these, there is yet another obstacle, perhaps a greater one,—that few will be found, the con-

stitution of whose mind permits them readily to believe that an attack of such violence, whether warranted or not, has not been incurred by some serious mis-step; or, in short, that a contest can exist, for which the aggressor has not some provocation.

The "*Statement of the Trustees*" has placed me in the position of defendant in such a case as I have described. And in order that the destruction of my character may be complete, and the impeachment penetrate to recesses where no vindication could reach; the huge edition of twenty-five thousand copies has been printed and distributed throughout the land. All the lists of editors, of bankers, of collegiate and academic professors, of clergymen, of physicians, of literary and scientific societies, have been conned over for addresses, to which copies of this book might be sent. And—that all reply or vindication by friends, or honest men acquainted with the truth, may so far as possible be cut off,—a simultaneous attack is organized upon the friends who defended me before; and writers are employed to traduce and to denounce through the public press those gentlemen who have honored and comforted me with their approbation, and with public expression of their sympathy.

In now breaking through the long-continued silence which I have preserved hitherto, my purpose is two-fold: first, to present as concisely as possible, an account of my connection with the Dudley Observatory, and of the quarrel fastened upon me by Mr. Olcott; and secondly, to reply to the "Statement" of the Nine Trustees, both in general and in detail. In this latter process, it will of course be necessary for me to confute the trivial as well as the serious allegations of my accusers, and thus to expend time, strength and space upon the discussion of matters entirely foreign to the main points, and which seem indeed to have been introduced only for the purpose of complication and confusion. But the disadvantages, which would arise from leaving a single charge or imputation unexamined, appear likely to be under the circumstances so much greater than those which will spring from giving time and place to comparatively unimportant, or even absurdly insignificant matters, that there seems little room for hesitation.

My connection with the Dudley Observatory began on the 3d day of September, 1855, on which day, the Board of Trustees elected, or professed to elect, a "Scientific Council," consisting of Professors Henry, Bache, Peirce and myself.

My relations as a member of the Scientific Council were declared severed on the 26th June, 1858, by a resolution which was passed by a majority of nine to four, two of the Trustees being absent from the meeting. But the majority have never, in terms, repealed the vote ratifying the compact by which the Observatory was placed in my charge.

A conditional promise of Prof. Bache, to aid incidentally through the loan of an instrument, and through an observer from the Coast Survey, and promises by Prof. Peirce and myself, to aid with our best efforts and counsel, preceded our official connection with the Observatory by about ten days.

In the same month, September, 1855, I embarked for Europe in behalf of the Observatory, returning Dec. 30, and since that time have rendered such gratuitous personal aid to the institution as my abilities and attainments permitted, the whole being, up to June, 1858, at the request, and with the express approval of Mr. Olcott. During this entire period, I have never, directly or indirectly, received or asked any remuneration for my services, all of which were cheerfully given without recompense, direct or indirect. During the first two and a third years I estimate the time devoted to the Observatory as averaging about three and a half hours daily. During the last ten months the time given has averaged about six and a half hours. Not even my traveling expenses have been refunded, except a portion of those incurred during my voyage to Europe. The amount of actual money outlays incurred by me in behalf of the Observatory is between five and six thousand dollars.

The work done by me prior to January, 1858, consisted in planning and procuring instruments, abroad and at home; in obtaining books for the library; in devising plans by which the building might be adapted for their use, the apparatus and instruments erected, the rooms equipped, and the like. Also in giving constant advice to Messrs. Olcott and Armsby, and

directions to a subordinate delegated for the purpose of residing at or near the Observatory, and of preventing, as far as possible, any mistakes or blunders in the work proposed.

Prior to December, 1857, I know of no complaint against me by any one connected with the institution; and I am aware of no open and responsible charge previous to May 22d, 1858. But I had for a long time had cause for complaint against one Trustee. Dr. Armsby, whose constant interference with my plans, and whose foolish and lavish expenditure of money had occasioned me much annoyance and anxiety; and had led to earnest, though friendly appeals on my part, in behalf of the interests of the Observatory.

It was, of course, my desire to make these appeals,—or protests, as they might in fact be called,—with as much delicacy as was possible; for, apart from the fact that questions of finance were entirely out of my province, the constant zeal of Dr. Armsby and his apparent disinterestedness had been such as to entitle him to the highest consideration. It is true that my judgement was greatly at fault in the estimate of his character; that his meddlesomeness was mistaken for disinterestedness, and his love of apparent importance mistaken for devotion to a noble cause. But men of more knowledge of the world than I possess would not improbably have fallen into the same error.

Only one cause of dissatisfaction existed, to my knowledge, in the mind of any Trustee previous to the year 1858; and this was, that while Mr. Olcott had insisted upon my appointing Dr. Peters as my assistant, I had declined to do this, after his conduct had put my association with him entirely out of the question.

Upon a proposition of Mr. Olcott, made on the 19th of December, 1857, a formal compact was made between the Trustees and the Scientific Council. By this compact the Council were confirmed in their position; and in addition to this I was installed *in charge of the Observatory, subject only to the Scientific Council.* The Council, on their part, undertook to carry on the operations of the Observatory without making

any demands upon the funds of the institution for the personal services of the Director and his assistants, until Mrs. Dudley's endowment of $50.000 should be restored, which it was stated had been encroached upon to such an extent that two years' interest might be required to make the principal good.

Thus I became Director. On the 9th of February I presented myself to assume personal occupation, but the premises not being ready, I delayed the removal of my residence from Cambridge to Albany, until Feb. 20, at the instance of Mr. Olcott.

On the 2d of March, a meeting of Trustees was held, at which Mr. Olcott was elected President, and an Executive Committee consisting of nine, and from which those Trustees were excluded, who it was thought could not be relied on to support Mr. Olcott, was appointed and clothed with full power.

On the 4th of June, 1858, Mr. Olcott obtained from the Trustees a resolution declaring that a "Want of Harmony" existed between me and "the members of the Board." The phraseology employed and the circumstances of the case refer this "want of harmony" (as will be hereafter shown), not to my relations with *the Board*, or with *all* its members; but at least in its origin, with certain members, namely: Dr. James H. Armsby, Mr. John N. Wilder and Mr. Robert H. Pruyn, who carried their personal grievances on account of some alleged, but in fact unreal, want of courtesy towards them on the part of some of my assistants, to the Executive Committee and to the Board.

This resolution was officially communicated to the Scientific Council, who, in reply, asked for information, and promised to assemble soon at Albany. On their arrival, however, Mr. Olcott refused to allow any intercourse between them and the Board.

On the 25th of June, two days before they arrived in Albany, Mr. Olcott convened the Board of Trustees, and read before them a Manifesto against me, which was adopted by a majority, consisting of nine, and was forthwith published to the world through the daily press. It was a bold and venomous attack upon my character, and as false as it was bold. On the basis of

this document he also procured from the majority of the Board a resolution that the "arrangement contemplated" by their vote of the 4th "*involved* [my] *immediate withdrawal;*" and another resolution to the effect that they would no longer recognize me as a member of the Scientific Council.

The Council asked a meeting with the Board, which, despite the earnest solicitation of several Trustees, was refused by Mr. Olcott, who also had from the beginning of his presidency denied me all access to the Board, and (except on one occasion) to the Executive Committee. He also refused to convene the Board, to lay before them terms of conciliation offered officially *to the Trustees* by the Scientific Council. He also refused to offer any evidence to sustain the allegations of his Manifesto. The Council then proceeded to an investigation, with such means as they had at their command; and, having found sufficient evidence to prove every charge false or frivolous, they offered to the Board, in the form of preambles and resolutions, their *Protest* against the proceeding; and, finally, they resolved to take personal charge of the institution, each of the three alternately for a month. This was July 2.

Upon this Mr. Olcott, who had previously refused to convene the Board, called a meeting July 3, unknown to the Council, and procured from the majority a resolution to dissolve all connection with the Scientific Council.

The Council then resolved to stand upon their rights, under the compact which the Board had formally ratified Jan. 19,—as a course indispensable to the care and preservation of the Observatory and instruments, and as due to the interests intrusted to them, and to the pledges which they had given to the donors.

One thing alone remained—publicly to expose the falsehood and baseness of Mr. Olcott's attack upon me; and having found my course deserving of their approval, to justify and defend it. This they did, fully and triumphantly, in their pamphlet entitled "*Defence of Dr. Gould,*" published on the 10th of July.

Upon the appearance of this pamphlet a large number of the leading gentlemen of Albany published through the daily

press, a call for a meeting of citizens opposed to the high-handed and oppressive action of Mr. Olcott and his majority. The meeting was held at the City Hall, and numerously attended. It was addressed by several citizens, and by Professors Bache and Henry. Resolutions, strongly and indignantly condemning the course of the Board, were passed with entire unanimity, and a committee appointed to prepare an address to the public. This Address was published soon after, and has been widely circulated; and a familiarity with the circumstances enabled its signers to cover the whole ground so thoroughly as to leave nothing farther needed as the case then stood. This Reply will abundantly furnish the evidence of its entire correctness.

Thus matters rested until August 27, on which day appeared the volume of the majority—nine names being subscribed to it. This Second Attack of Mr. Olcott (for he, as I shall show, is the *responsible* person) is still more bold, more venomous, and more false than the first attack of June 26; and it is far more adroitly contrived and more plausibly constructed. It is a volume of massive and well-cemented falsification, resting only upon a foundation of false testimony fabricated especially for the purpose, and intended principally to injure me and incidentally the other members of the Scientific Council.

To this second attack of Mr. Olcott, taken also in connection with the former, I am now called on to reply; and it will be my endeavor to meet it with a full and complete exposure.

Meantime, acting under the advice of eminent counsel, and relying upon the tribunals of justice to give full protection to my rights and those of the Scientific Council under the compact of December,—feeling the heavy responsibility before the scientific world, which has been laid upon me,—it is my purpose and hope, with the blessing of Providence, to save the Dudley Observatory, if possible, from becoming a mockery and a reproach; to render it capable of fulfilling what astronomy demands of it, what its munificent founder intended, what its donors desired, and what the Scientific Council pledged themselves that it should become.*

* Since this was written, I have been driven from the Observatory by a gang of men hired by Mr. Olcott.

CHAPTER II.

MR. OLCOTT AND HIS COADJUTORS IN THESE ATTACKS.

Of the fourteen members who now compose the Board of Trustees, the signatures of nine are affixed to the pamphlet, and have been also appended to a published card, denying solemnly that any of the extracts given by them from letters of mine have been falsified or perverted. These are Messrs.

THOMAS W. OLCOTT,	W. H. DEWITT,
JAMES H. ARMSBY,	ALDEN MARCH,
IRA HARRIS,	SAMUEL H. RANSOM,
ROBERT H. PRUYN,	ISAAC W. VOSBURGH,
	JOHN F. RATHBONE.

Of these gentlemen I must necessarily say a few words, endeavoring however to use that moderation which is due to myself, if not to them, and confining myself rigorously to such statements concerning them as are strictly requisite for defence.

The first two of this list are those with whom alone I was well acquainted prior to January last. The one was Vice President, the other Secretary, of the Board of Trustees, and although, as I now learn, without authority formally conferred by the Board, (for the Board was not accustomed to hold meetings) these two exercised unquestioned control in all the affairs of the Observatory. With them, and them only, rested the full and supreme authority; and until the close of the year 1857, all the members of the Scientific Council supposed them to be *de jure* as well as *de facto* the Executive Committee, and spoke of them as such. Of all the letters quoted in the "Statement," as addressed "to the Trustees," or written "by the Trustees," *every one was written to or by one of these two persons.* No one of the other seven knew, as I am convinced, what was doing or done, unless accidentally. No one of them, when he authorized his signature to be appended, could have had the means of knowing whether the assertions for which he pledged his word were true or not. Although the means of ascertaining their falsity was at hand, and the proofs to a large extent since given to the public, not one of the signatures has been withdrawn. Two of the seven,

Messrs. John F. Rathbone and Ira Harris, have been elected during the present year, the former in January, the latter in June. Yet they also certify by their signatures to the "Statement." From the time of my first connection with the Observatory in September, 1855, until January last, there was not one of the majority, excepting Messrs. Olcott and Armsby, with whom I had more than a very casual acquaintance; and there were not more than two others whom I knew by sight. I had once or twice met Judge Harris, but he was not a Trustee. No meeting of the Board was held during this entire interval, (at least so I was informed by the Secretary,) certainly none for the transaction of any important business; and to the best of my knowledge, no Trustee other than Messrs. Olcott and Armsby took any care, exercised any supervision or control, or had any personal knowledge of the affairs of the institution.

Mr. Olcott who so constantly throughout the book speaks of himself as President, was not President until March, 1858, when General Stephen Van Rensselaer,—who had generously given a tract of about eight acres of land, mostly within the city limits, who had been President of the Board since its incorporation, and whose sense of honor and decorum had been so shocked at the course of Messrs. Olcott and Armsby, that he would no longer consent to give the implied sanction afforded by his name,—abandoned all connection with the Board, by resigning his Presidency and his Trusteeship together. The Presidency was instantly filled by the election of Mr. Olcott: but the resignation as Trustee was not accepted until some three months later, when it was taken from the files, and the vacancy in the Board filled by the choice of Judge Harris, who is not a donor.

For two years, while the Observatory was in progress, my relations with Mr. Olcott and with Dr. Armsby were most cordial. In my frequent visits to Albany upon business of the Observatory, my time was chiefly passed in their society. Faith in the sincerity of their devotion to the lofty aim which they professed to have in view, rendered them objects of my sincere attachment, and led to an under-estimate of such fail-

ings as a continuance of the intimacy revealed. The one great fault which would have rendered all other manifestations suspicious, that one great undermining hollowness which cancels and eliminates all seeming virtues, Want of Honesty or Truthfulness, was unsuspected till the last; and their other predominant traits, though seen and recognized, were venial and trivial compared with the truthfulness and disinterestedness by which I thought their every action guided.

Mr. Olcott I regarded as a generous man, determined to signalize himself and contribute to the elevation of his city by promoting the establishment of literary and scientific institutions, which should advance the intellectual progress of America, ennobling and exalting all who might feel their influence. Dr. Armsby I considered as a man, the disinterestedness and earnestness of whose heart would far more than atone for the weakness of his head, and the deficiencies of his education. A true, honest, and totally unselfish man, such as I supposed him to be, is too rare and priceless to be discarded for incapacity of judgement, or extravagance of schemes; and I thought that his wild exuberance of crude suggestions might be guided into useful channels. The oft-repeated declarations and promises by which Messrs. Olcott and Armsby enlisted the aid and co-operation of the Scientific Council, and the apparent truthfulness and unselfishness which seemed to govern their actions, produced a great effect, and we devoted ourselves with heart and hand to the noble end which we believed them to have in view. We knew nothing of their antecedents, but supposed them men of unsullied reputations. No friends gave us hints of the past, or warnings for the future. We trusted implicitly, and have found ourselves terribly deceived. The event may not be creditable to our judgement, still I will freely confess that bitter as has been the experience, and severe the ordeal, I would rather trust again to such assurances in behalf of such a cause, and be again deceived, than suffer it to fail for want of aid which I could give.

To these two men I became strongly attached, and, even now, each reference to their letters, written or received, brings a new

pang. The Ruler of the Universe works with strange implements, and his ways are past our finding out. Should the present crisis end in the establishment of a genuine Observatory, to be employed for the advancement of astronomy, not for the amusement of the idle, to extend the bounds of human knowledge rather than to please as a play-thing, the price paid in endurance may not have been too great. At any rate, I shall not complain of it.*

Mr. Olcott is the principal officer nominally, and the only manager practically, of one of the most prosperous banking institutions in the city. It is important that the extraordinary command and control which he has exercised over the majority of the Board of Trustees should be understood, in order that my relations to him be comprehended. And I therefore do not pass beyond the record when I say that his influence is emphatically a money-power, and that his predominant characteristic and ruling passion is a love of power. Not the power which sways the popular masses, nor that which might elevate and benefit his fellow men, nor that attained by the winning of a well-earned name; but an undisputed throne in a bank parlor, a despotic rule over bank clerks, a supreme command over bank directors, an unchecked dominion over bank borrowers, and the absolute control of large cash funds, represent the kind of dominion which he loves to exercise. Probably no road to or from bank accommodations was ever more clearly marked out. Nothing is exacted of the applicant but "Harmony" with the President. This is with Mr. Olcott the one great virtue; its absence is the only crime. A "want of harmony" in a director is the sure signal for a change at the next election; a "want of harmony" in a debtor is the sure precursor of some sudden foreclosure or demand; "want of harmony" in a citizen is but too often the forerunner of some loss of financial credit, if he be engaged in commercial pursuits. There are always friends to reward, always enemies to punish, and always bank funds available for either purpose. So much it is necessary to state as preface to the assertion, that Mr.

* The mob force employed by Mr. Olcott, and by which I have since been driven from the Observatory, was not anticipated at this time.

Olcott wields a very considerable power in the city of Albany; that this power arises not from any moral elevation of character or reputation for the same, but from the loanable funds of a bank controlled for thirty years or more mainly at his autocratic will and pleasure. Most of the active supporters whom he has enlisted against me in this crusade are his by a peculiar title; he has purchased and paid for them. Of the nine names appended to the "Statement" of the Majority, three are directors of his bank, including the President and Vice-President of the trustees; three others, members of commercial firms, have important dealings with this bank, and receive accommodations at its counter; and two of the remaining three are Dr. Armsby, the ever-active and faithful adjutant of Mr. Olcott, and Judge Harris, whose past and present relations to him are very well understood in Albany.

Dr. Armsby is, as I have said, the busy, untiring, gossiping, and wondrously meddlesome agent of Mr. Olcott for petty matters. His pertinacity is equal to Mr. Olcott's vigor of will, and what the one conceives and directs, the other executes; with marvelous indiscretion, it is true, but with a pertinacious zeal which supplies the place of good judgement. His love of power is equal to that of his chief, but tends in a somewhat different direction—he aspires to no dominion over Boards of Directors or of Trustees, but to authority which enables him to employ this mason and that carpenter, and to figure as an important personage before the eyes of admiring apprentices and day-laborers. These simple traits define the man, and explain the whole financial difficulty in which he has been enabled to plunge the institution by his extraordinary recklessness, and which has rendered it necessary for Mr. Olcott, (the "Responsible Guardian," as he terms himself,) to find some victim upon whose unhappy shoulders the burden of this "wasteful extravagance" may be laid. It will not be difficult for any one to perceive how these very qualities of meddlesomeness and pertinacity led me, while ignorant of the deceitfulness upon which they are engrafted, to regard him as the impersonation of disinterested enthusiam in behalf of a noble cause. He was

profuse in promises, in outlays, and in the grandeur of his aspirations;—but it appears that all this was done with the trust funds confided to his charge. He was profuse in his expressions of gratitude in behalf of the Trustees, for what it had been in my power to contribute to the common cause, viz: my devotion and my toil; he was, in fact, profuse in every thing except in donations—these he never made; but it now appears, that there was a proviso to the gratitude, as well as to the promises and declarations—it held good just so long as there was no "want of harmony" with Mr. Olcott. And the first exhibition of manly self-respect and refusal to comply with the wishes of the supreme Manager, furnished the fatal signal; it was the one unpardonable crime, a breach of "Harmony."

These two members, in the relations already described, have controlled from the beginning, and still control, a working majority of the Board of Trustees of the Observatory; a single exception only to the absoluteness of this rule, occurred on the 18th of January last. Mr. Olcott and Dr. Armsby, received and expended the funds, gave directions, and until a recent period, exercised the power of the entire Board; and all this, as I am now informed, actually without any authority, except such as was afforded by the unquestioning neutrality and passive toleration of their co-Trustees.

The five last-mentioned gentlemen of the list occupy a peculiar position. Some of them, I am credibly assured, shield themselves under the declaration, that they did not read the documents to which their names are affixed, but gave full authority to Mr. Olcott to employ their signatures; a kind of "open indorsement," not uncommon in the ordinary concerns of trade, where dollars only are concerned, but by no means justifiable in a matter like this.

Of their moral responsibility, I say nothing; but, grossly as they have outraged all that is dear to me, I will not withhold my conviction that they designed no deliberate falsehoods; but are sheltering themselves under the pitiful plea, that "they have given Mr. Olcott leave to use their names," and that the accountability rests with him.

Only a higher Being than man may judge them aright. I will however say, of these five gentlemen, that their course has excited my profound sorrow rather than any other emotion. They have rather lacked the courage to do right, than possessed the boldness to do wrong. While they have not ventured to participate actively in the foul work, they have not dared either to protest against it or to refuse the use of their names in its support. They have endeavored to conceal their participancy from themselves, in the hope that they would thus become absolved by others. Placed in a trying position, they have not dared oppose the unsparing policy of a man whose favorite boasts are "that he was never yet put down," and that "no one has ever crossed his path with impunity." Thus much I would say of Messrs. DeWitt, John P. Rathbone, March, Ransom and Vosburgh; I bear them no ill-will, for regret has taken the place of indignation. While composing that portion of the majority, whose independent personal action might have carried weight and influence, as coming from persons of previously unimpeached integrity, they have been willing to allow the use of their names in cover of this wicked attack, and to contribute respectability to the list of signatures affixed to the "Statement,"—although some of them have not hesitated to avow that they did not read it or know its contents.

The deliberate destruction of a man's physical existence is the highest crime known to human law; its highest degree being when the deed is done in cold blood for gain. What relation the attempt to commit that crime bears to an attempt to destroy the usefulness and the character of an innocent man, who has not only merited no attack but actually given no provocation, I leave for others to say. By braving the consequences of Mr. Olcott's displeasure, these gentlemen might have made for themselves an honorable and proud distinction; their names would have been treasured and bright in the memories of their fellow citizens, and they would have escaped the self-reproach from which, I will not doubt, they are now suffering. Though my acquaintance with them is slight, it is sufficient to grieve me deeply at seeing their names affixed to a series

of gross misstatements, falsified quotations, and unfounded calumnies.

Beside these five, and the two managing members before spoken of, there are two other Trustees who make up the nine. These two form also a class by themselves. For—while occupying the same position as the five, as regards knowledge of the facts,—they have, unlike the five, entered bitterly and violently into the contest.

They are Messrs. Ira Harris and Robert H. Pruyn, gentlemen too well known and understood in Albany to require any allusion or comment from me; although for the sake of readers at a distance it is necessary in self-defence, to allude to their standing at home; and to say that their names are not considered as adding very much to the moral strength of any document. The former occupies at present the high position of Judge of the Supreme Court of this State; yet I very cheerfully leave the weight belonging to his name, to the judgement of that community in which his life has been passed, and which is familiar with the character, repute and incidents of that life. My desire is to attack no man; and while neither afraid nor unwilling to speak the whole truth so far as I speak at all—my purpose leads me only to say so much as may be requisite for the defence of my character and honor. Regarding my scientific attainments or deficiencies, I care for the judgement of none but my peers in science; yet acknowledge that reputation as a man of truth, honor and discretion, is dearer than all else in life; and that the respect and esteem which I covet from all reputable men is quite independent of the astronomical knowledge which such men may possess.

It was this Judge,—whose proper office is to hold the even scales of justice between man and man,—who, on the 4th day of June last, was elected Trustee as soon as the meeting of the Board was called to order, who hastened from the apartment where he was waiting the expected summons, and within half an hour offered a resolution that I be expelled from the Observatory! It was this Judge,—ignorant of the whole history of my relations with the institution, except so far as informed

of them by one of the conflicting parties,—possessing so little sense of the dignity with which his high office should have invested him, as to plunge headlong into the arena of personal combat,—not shrinking from a public avowal of the purpose for which he had been elected, by hastening to the performance of his prescribed part,—not hesitating to furnish the use of his name for the indorsement of grave charges, which he had not, and from their very nature could not have, investigated, and which were based upon occurrences previous to his connection with the Board,—it was this Judge, who unblushingly moved my expulsion, in obedience to Mr. Olcott's behests; and this, too, before I had been arraigned at the bar of even such a tribunal, before any official complaint or representation of alleged short-comings had been made known to me, and at the very first meeting of the Board subsequent to that which was called in consequence of my arrival to assume charge of the institution. This Judge knew nothing of the case, beyond the simple fact that the President and his adjutant, the Secretary, had, for reasons of their own, determined to "rid themselves of the Director." He was well advised of the honor intended him, and of the special service required of him. He has for a number of years been thoroughly accustomed to the exercise of "Harmony" with Mr. Olcott, and he went straight to the performance of the service, regardless of consequences. At an early stage of the proceeding this Judge declared that he was actuated in the part he was taking, by the consideration that if anybody was to be crushed in this business, he would rather it should be the stranger than an Albanian. And he has stated that he knew nothing against Dr. Gould; and it would be a great mistake to suppose him influenced by hostility to him or by any want of respect for his attainments. Yet, something has 'influenced' him.

In the farther prosecution of the duties imposed upon him by Mr. Olcott, this Judge has now prepared the "Statement of the Trustees" for the press,—a statement which consists, as I intend to show, of extracts falsified, distorted and garbled,

from private and often highly confidential letters, furnished him for the purpose by their recipients; of sophistical and tricky special pleas, artfully contrived to fit those passages which were to be quoted as evidence; of deliberate misstatements, of equally untruthful intimations, and of vulgar and unworthy sneers and innuendoes. Harsh words, and I must prove that they are not merely justified, but demanded.

I am well aware that Judge Harris was not the sole author of the "Statement of the Trustees;" that others were employed upon the work, prominent among whom was the late Mr. John N. Wilder, whom the solemn hand of death now protects. But that Ira Harris prepared a large portion of the book, including many of the alleged extracts, and that he edited the whole, he dare not deny.

The other Trustee, Mr. Robert H. Pruyn, is a person whose bills for iron work have, as I am credibly informed, done much towards swelling the amount of those "wasteful expenditures" for which he now asserts that I am responsible. There was one of his bills for the correctness of which I was really to be responsible, and which I could not approve; and through the unauthorized and unjustifiable exhibition to him by Mr. Olcott of a note which I had written to the latter,—stating the facts and asking advice as to my proper course,—his personal enmity was incurred.

Such are the Nine Trustees who, assuming the name and title of the entire Board, have signed and published the work to which I am now called upon to reply. It was necessary to allude to them personally, because their supposed position in the community might otherwise be cited to add weight and credibility to the assertions vouched for by their names. Having given the necessary information, I shall allude to them individually hereafter only as the case may require.

Their intimation that I have stood aloof from kindly relations and courtesies to them, and have endeavored to cultivate a party of friends among those opposed to the Observatory enterprise, is untrue. There is not one of them towards whom I have not advanced as far as self-respect and manliness per-

mitted, in the effort to cultivate acquaintance, and if possible, friendly regards.

Although I am now aware that their relations to Mr. Olcott did not permit this,—and that the arrangement in accordance with which I came to Albany, was not at the time intended to be carried out by their chief,—yet no suspicion of this fact existed in my mind until it was taught by experience.

They were gentlemen with whom I was to be officially connected, and with whom agreeable relations were for every reason earnestly to be desired. Two of them had been generous donors to the Observatory, and the knowledge of this circumstance had won for them my respect. I was aware that Dr. Armsby had, for some time previous to my arrival, devoted himself sedulously to the work of misrepresenting and calumniating me to the rest; and I felt a pride in anticipating the thoroughness with which personal acquaintance and observation on their part would expose the true state of the case, without a spoken word from me. In short, I did not doubt that they were mostly sincere men, who wished to be guided by their duty; and believing them such, was desirous of their esteem and approbation. And though the cordially hospitable reception, which welcomed me in this cordial and hospitable city, came from gentlemen who were not members of the majority,—yet, provided that I treated the individual Trustees with courtesy, and manifested no tendency to slight them in word or deed, can they have any right to complain of my becoming attached to friends who may not form part of the circle which surround the authors of the pamphlet? If gratitude to those who have made me welcome to their homes and hearts, if esteem for the social and domestic virtues with which I soon became familiar, if respect for culture and refinement, had all combined with those affinities which spring from taste and education, to bind me in friendship with others,—had these Trustees any right to complain, so long as I demeaned myself with courtesy to them, and rendered gratuitous and laborious service to the Observatory? My relation to the Trustees entailed, in my judgement, no occasion for cringing

servility. The acts of courtesy and hospitality, which so soon after my removal to Albany made me feel no longer a stranger in the city, came from others; and I am aware of no consideration which should preclude me from habitual intercourse with honorable men, because they may not be members of the Majority of the Board of Trustees.

If these Trustees mean to say that I stood in any manner aloof from them, or manifested any consciousness of superiority, they mean to say what they know to be untrue.

In speaking of these men, and especially of Messrs. Olcott and Harris, every reader will perceive, that however sorely tempted, I have not allowed myself in these remarks to go beyond the strictest line of self-defence, or to pass beyond the record of personal experience and of Observatory relations for the sake of retaliation, or even of depriving them of power for future evil. In speaking of them, it has been and will be necessary, in simply protecting my own character, to use strong words. Yet I claim the fault is not in me, but in those who have been guilty of such acts, that the very naming and description of them demand the use of terms and epithets, the mildest of which, at all suitable to the case or sufficiently expressive of the character of the acts, are repulsively coarse and harsh, and are such as nothing but an overruling necessity could induce me to employ.

CHAPTER III.

NATURE OF THE ATTACKS.

The first assault of Mr. Olcott, (known as the Manifesto of June 26th,) was intended to overwhelm and paralyze me by its ferocity and and violence. It was, perhaps not unnaturally assumed that a man of retiring, studious habits, and of sensitive organization, would be entirely "crushed" (to use the favorite word and threat of my assailants,) by such bitter and unsparing denunciations. It came unexpectedly upon me; for on the last occasion that I had seen Mr. Olcott, his countenance was wreathed in smiles, and I had begun to believe, that even his

feelings had been influenced by the unswerving and uniformly conciliatory course which I had pursued. From the beginning to the end, this Manifesto was one series of deliberate untruths and intentional distortions. And the impossibility of dealing with or characterizing these two attacks, without the employment of terms and phrases which a gentleman would naturally desire to avoid, is only inferior in painfulness to the humiliation of contending with antagonists who resort to such means of aggression.

The Scientific Council, after investigation of each and every accusation and imputation brought by Mr. Olcott, and "adopted" by his majority in the Board, found them severally untrue, so far as they presented any cause for censure; but so persistently has the warfare been carried on, that this verdict has itself been made by Mr. Olcott and his colleagues the basis of an accusation that the members of the Council too, are usurping and unjust judges.

Thus stood the case previous to the publication of the second assault. I had myself preserved an impassive silence, anxious to be judged by any reasonable and honest man who would incur the labor of an examination. The tribunal, to whom the majority of the Trustees (not I, as is alleged by the accusers,) had appealed, had deliberately assembled; and, when Mr. Olcott refused to offer any evidence in support of his charges, or to convene the Trustees, or to afford an opportunity to the Council for conference with the Board, they had examined such evidence as was accessible to them and found it amply sufficient to disprove and rebut the accusations of Mr. Olcott.

The Council were surprised at his refusing them a hearing or an opportunity to meet the Board. But his refusal did not surprise me, for I had been consistently and uniformly excluded from their meetings. Never was I allowed to attend a meeting of the Trustees, except on the 19th of January, when the Council met them in form, addressed them and retired. Never was I invited to be present at a session of the Executive Committee, except on the occasion of their first meeting, convened at my formal application, to enable me to present a communication;

one, moreover, to which, although it was of the first importance, they never vouchsafed a reply. The proposition that I should attend these meetings was declined by Mr. Olcott.

The Council were surprised too, that Mr. Olcott was unwilling to present his evidence to them, for the world had awarded them the reputation of honorable, just and truthful men, and the majority had actually appealed to them to act in the emergency. But his "discreet unwillingness" did not surprise me, for he had no evidence to offer. Seven weeks elapsed between the publication of the "Defence" and that of the pamphlet of the Trustees. And what did this pamphlet present? Evidence in support of his original charges already published to the world in justification of my attempted expulsion? No. Only in support of a very few of them are there attempts at evidence. Its 173 pages consist chiefly of a different array of accusations, which had been built up, meantime, upon documents falsified for the purpose. Those original charges which are repeated, at all, are either reasserted without evidence, or reproduced with essential variations. The remainder are passed over in judicious silence, while a multitude of new ones, the offspring of necessity, are added. The Accusers indeed allege, in this second attack, that some of the charges against which the Defence of the Council was directed, were never made. Public opinion had gone so decidely against the Trustees that it was necessary to vary the issues; drowning men catch at straws. Side issues of every kind are introduced in a deliberate attempt to hide, befog or confuse the main questions. Sneers and innuendoes, proverbially difficult to answer, abound; personal invective is substituted for argument, and falsehoods by implication are ingeniously engrafted upon falsehoods direct. A sedulous and sustained effort is made to embroil me with personal friends, or with individuals not at all parties to the contest, and by every other feasible means to excite prejudice against me. More than all, and worse than all, private and confidential matters—contained in letters to Mr. Olcott and Dr. Armsby, who once pretended to be my warmest friends, and to whom I had habitually written with an unrestrained freedom,

which laid them under the strictest obligations of confidence, none the less sacred because sometimes only implied,—are now publicly brought foward with intent to injure the writer. But as this betrayal of confidence, this treachery to honor, decency and manliness, could produce in itself nothing which could be rendered available for the purposes of the authors, these confidential letters were deliberately altered and falsified, so that they might be used against me.

Those who thus perverted truth to gratify personal malice little dreamed that *press-copies* of the original letters were in existence, and that, when they proclaimed (page 163, 164) that they were not violating confidence, because the letters published were "official," it could be placed beyond the possibility of doubt or denial that the words "Private" and "Confidential" were actually written at the top of some of the letters from which they quote. I have already directed public attention to this matter in a letter published extensively through the daily press. And in the present Reply I shall give the evidence in full, by presenting authenticated extracts from the original letters, together with the extracts as they appeared in the "Statement" of the majority. All can judge between us. And let all remember that my Accusers say:

"But in this statement, the Trustees have thought fit to confine themselves to matters relating directly to the Dudley Observatory, and have availed themselves only of such letters as are strictly of an official character, carefully abstaining from all reference to such as might by any possibility, be regarded as confidential." (Page 163, 164.)

The law does not reach such crimes as these. They stand not upon the definitions of the statutes. But in the sight of every honest man this is forgery,—not "moral forgery," nor the technical forgery of the statutes which apply to pecuniary matters, but none the less forgery and certainly no less a crime. And even in these days it is almost inconceivable that to such a record of human debasement should be appended the name of a man who is a Judge of the Supreme Court of the State.

The pamphlet is artfully contrived under the guidance of two leading ideas. The one is to avoid any discussion of most of the charges originally brought by Mr. Olcott, indorsed by

the Nine, and refuted in the "Defence;" the other is, by misrepresentation of real occurrences, and distortion of passages, or fabrication of pretended passages, in real letters, and by presenting both in a false light, to sustain such special pleading as these occurrences and quotations seemed capable of supporting. Only the fortunate habit of retaining transfer-copies of my letters has saved me from falling a victim to their artful machinations.

In regard to the only two really grave charges of the first attack, namely, incompetency as an astronomer, and peculation as a public officer,—this second attack now actually insinuates that the former accusation was not brought, and immediately reiterates it; and it solemnly denies that the second was ever preferred at all, and then proceeds to reiterate this also! I propose fully discussing these points in the appropriate place, hereafter.

The task of exposing the falsehoods, garblings and perversions in this second attack is a most repulsive one, and one which requires an amount of labor almost incredible to those who are acquainted with the facts of the case, and with the barefaced violations of truth, which seem susceptible of instant and complete disproof. The difficulty consists in the wily adroitness with which a coloring is slily given to every occurrence and every citation, to render it capable of prejudicing the reader in favor of their plea of my unfulfilled promises, inexplicable delays, reckless extravagance, and offensive personal character. Scarcely a quotation is given from my letters, scarcely an event narrated, to which some turn is not artfully given, for the sake of affecting the reader's mind in these respects,—no matter what may be the immediate subject under consideration. The proposed inferences are not openly drawn by the authors at the time the insinuations are begun to be conveyed, but their apparent cumulative evidence is meantime at work to bias the reader; so that when the charges are directly made they fall upon soil prepared to receive the seed. Painful and wearisome as is the task of correcting the citations, exposing the perversions, and disproving the falsehoods, one by one,

I have undertaken it, though worn and well-nigh exhausted by the pressure of my heavy and manifold labors. And with the blessing of God, I will finish the work, that my friends may have no cause to regret their friendship, and that such of my kindred as may survive me, may never have occasion to hang their heads at the sound of my name. Money will not do all things; and though it should succeed in "crushing" me, it shall not "crush" my character.

For the sake of avoiding too great a consumption of space, I will give only a few specimens of the falsehoods, garblings and perversions in this place, to serve as illustrations. They shall be severally considered in the Detailed Refutation, which will constitute the second part of this Reply.

1. *Gross Falsehoods.*—It is my deliberate assertion, made after careful estimation, that the wilful and direct misstatements (apart from those by falsification of documents,) amount to very nearly, if not quite, five hundred, being, on an average, about three to the page. I cite a few as illustrations:

"At this time, the project received some slight check, from the discouragement of Messrs. Bache, Peirce and Henry; who, at a meeting at the Mechanics' and Farmers' Bank, advised against the enterprise." (Page 5.)

"He [Prof. Bache] then proposed that the citizens of Albany should furnish the means to purchase a Heliometer." (Page 7.)

"Dr. Gould offered to go to Europe, for the purpose of securing these important instruments." (Page 9.)

"It [the Calculating Engine] arrived in April, 1857, but was laid aside for more than twelve months, when it brought forth a column of printed figures, and the Trustees were charged two hundred dollars for bringing it into use." (Page 31.)

"Both instruments, Dr. Gould had promised to have mounted nearly a year and a half before." (Page 48.)

"All were agreed in deploring and condemning the conduct of Dr. Gould." (Page 86.)

"Thus, they assumed to declare the rights and powers of the Trustees, and to make them in all respects, subordinate to themselves." (Page 99.)

"Dr. Gould has stated to several members of the Board of Trustees, that it [the longitude-determination] would occupy TWENTY-FIVE months, and that the work would be of such a character as to render it impossible to do any other Observatory work during that period." (Page 116.)

"The 'pledge' of Prof. Bache was to supply a Transit instrument for time, at a cost of $1,500, to be mounted and used in the Dudley Observatory." (Page 133.)

"A sentinel now walks upon his post at the gate of the Observatory, to repel any intrusion from its legal proprietors." (Page 171.)

There is no way of dealing with such assertions as these, other than by saying, that they are nakedly, wickedly, scandalously untrue; that they are destitute of even a colorable foundation; that all were known by Mr. Olcott and some others of the signers, to be untrue, and that any of the remainder might have learned their untruth by the slightest examination or inquiry. I give them as examples, being guided in the selection only by the fewness of words in which the falsehoods are contained. The falsity of scores of other assertions of the Nine Accusers shall be made apparent in the detailed refutation.

2. *Garblings.*—To these many of the same remarks will apply, and while the great mass of them shall be exhibited hereafter, I confine myself in this place to a few specimens, and the following statistics:

There are contained in the pamphlet of the majority, *seventy-one* alleged extracts from my letters to Messrs. Olcott, Armsby and Peters, of which I have succeeded in tracing *sixty-five* in my press-copies. Of these, *twenty-six* are either so mutilated and garbled as essentially to reverse their meaning, or contain absolute fabrications, these changes being in every case made the basis of a false accusation. *Twenty* more are grossly perverted for a manifest purpose. *Eleven* others are altered, although less grossly, and only *eight* are given as I wrote them. Of the six which I have not succeeded in identifying, I am certain that I never wrote at least one, and that one has been mutilated.

The case is analogous, with the alleged extracts from public letters and remarks of mine, and to a considerable extent also with those from the letters of Prof. Bache.

Annexed are a few illustrations of this garbling and mutilation:

(No. 1.)

From the "Statement," p. 131.

Leaving the Barometers, the Council next enter upon the Dome. Mr. Olcott had stated that Dr. Gould had applied for the building of a new Dome. The Council boldly say: "The letters of Dr. Gould show that no such application was made." Let us see what that gentleman's letter really *did* say. He writes:

"It (the Dome) *ought to be rebuilt.* * * * The bad construction of the base cannot be remedied by any reasonable expenditure. * * * As I cannot *altogether* surrender the hope of *yet* seeing some equatorial instrument in the dome before long, it seems to me that $1,800 could not be better employed at the Observatory. *May I beg for your* DECISION *as early as possible?*"

The Scientific Council might not regard this as an "application—most men would. Who, then, makes the "loose statement?"

What I did write to Mr. Olcott:

CAMBRIDGE, 1858, Jan. 28.

My dear Sir—Mr. Hodgins's report upon the dome came yesterday to hand, and it has given me some perplexity to decide whether I ought to recommend a new dome or not. The best way now apparent is that which I have here pursued, namely, to report to you officially the precise state of the case, giving, so far as possible, the arguments.

The truth is it ought to be rebuilt, and the money question is the only one of weight on the other side. The bad construction of the base can not be remedied by any reasonable expenditure; but when the total weight of the revolving portion shall have been reduced from 14½ tons to 9, and the strain of these 9 made equable (while that of the 14½ is often thrown in great measure upon three points instead of eight.) the error will, I think, be productive of no serious future evil. The four inches of settling will probably have reached their limit.

As I cannot altogether surrender the hope of yet seeing some equatorial instrument in the dome before long, it seems to me that $1,800 could not be better employed at the Observatory provided the means for equipment, &c., already alluded to in my letter of estimates, are not thereby to be jeoparded. This is the sole question.

May I beg for your decision as early as possible. Meantime, I remain,

Very sincerely yours,
B. A. GOULD, Jr.

THOS. W. OLCOTT, Esq.

On p. 69 the nine Trustees say that Dr. Gould had applied for an appropriation to build a new Dome, which would have cost $3,000. On p. 71 they assert that Dr. Gould had applied for the appropriation of $2,000 for a new Dome.

The truth is, that I communicated to the Trustees, (and with a distinct reference of the whole matter, including the money question, to them for their independent decision,) the report of Mr. Hodgins and the statement that a new dome would probably, all incidentals included, cost more than $1,500, and less than $2,000.

It is difficult to refrain from expressions of honest indignation at fraud so deliberate. The Accusers say "let us see what that gentleman's [Dr. Gould's] really *did* say," and then go on to give brief extracts, not from my official letter to the Trustees, but from a *private letter to Mr. Olcott*,—the whole sense and meaning of which is perverted by mutilation, to make it express the sense which the Trustees pretended to extract from it. That the public may see what I did write; I have given my letter to Mr. Olcott, entire from a press-copy. They make this letter express an unconditional opinion that the dome should be immediately rebuilt and call for an early decision *on that point*; whereas—while it informs the Board that according to Mr. Hodgins's report, the dome ought to be rebuilt,—it presents "the money question" as "the sole question" in the case, and asks an early decision *on this point*. I nowhere apply for the rebuilding of the dome, and in the official letter to the Trustees, *written at Mr. Olcott's request*, I carefully avoid taking any responsibility on the subject. A private letter to Mr. Olcott (sent with the one to the Trustees, and given above), is the one from which the Accusers quote, and which they so grossly garble. In this I gave my honest opinion as to what *ought* to be done; it was my duty to do so. I say distinctly that "the money question is the only one of weight on the other side," and state that by equalizing the pressure of the revolving portion of the dome, the strain will be so distributed as to be no longer dangerous. Finally I suggest that the sum of $1800 could not be better employed at the Observatory than in doing this, *provided* the means of equipment, &c., already alluded to in my letter of estimates, of Jan. 21, are not thereby to be jeoparded. "Who then," say the Accusers, "makes the loose statement?"

Let any honest man judge.

(No. 2.)

From the "Statement" p. 18.

On the 23d of April, 1856, writing from Cambridge, Dr. Gould says:

"The drawings I have been studying, and although my want of familiarity with architecture prevents me from understanding them fully, as yet, I hope to have a clear comprehension of the plan of alteration to-day."

On the following day he writes,

"The plan for changing the building—that is, altering the *two* wings,—is satisfactory and very handsome."

What I did write in a Letter to Dr. Armsby, 1856, *April* 23.

The drawings I have been studying, and although my want of familiarity with architectural drawing prevents me from understanding them fully as yet, I hope, &c.

From my Letter to Dr. Armsby, 1856, *April* 24.

The plan for changing the building seems very handsome, but then will arise that everlastingly tormenting question, which haunts us all through life,—$?

I invite the attention of all good and honorable men to the version which the Accusers have given of these letters. The substitution of the word "*architecture*" for my own words "*architectural drawing*," was probably made in order that I might be made to appear unacquainted with a more, rather than with a less, important subject. This is indeed a petty malice and needs no farther notice. But let it be well observed, that they have garbled my letter of April 24, not merely by omissions, but also by inserting words which I never wrote, and which change my whole meaning. I say not a word about "altering the *two* wings;" I do not say that the plan is "satisfactory" or that it *is* very handsome, but simply that it *seems* very handsome, and then qualify my cautious expressions of approbation by a "*but*," which the Accusers deliberately and wilfully omit. Their object throughout the entire "Statement" is to make the world believe that I am responsible for their reckless and wasteful expenditures. It would not do to quote a sentence from any letter of mine, going to show that I was cautious about expenditures, even in a single instance, and so they quietly omit the words "but then will arise that everlastingly tormenting question, which haunts us all through life,—$?" The authors of the "Statement" have invented the phrase "moral forgery;" they "felt constrained" to illustrate its application.

(No. 3.)

From the "Statement of the Trustees," p. 19.

In a letter written on the 26th of May, he evinced his deep interest in the affairs of the Observatory, in a somewhat melancholy strain. He sighs for a "full guaranty that the Institution shall keep up its vigor and activity," in case both Prof. Bache and himself "be taken away." He then proceeds in language, which now seems to have been almost prophetic:

"No man knows the dark and shadowy future; and the organization of the Dudley Observatory ought to be so thorough and permanent, that, were one Director to die, *the Trustees should be prepared to fill his place with another,* without deranging the activity of the work."

What I did write to Dr. Armsby, 1856, *May* 26, *marked* "*Private.*"

About the Observatory we talked a good deal, and Mr. Bache agrees with me that to leave present occupations and begin a new course of life would be injudicious, unless there were full guaranty that the Institution would keep up its vigor and activity in case both Prof. B. and I should be taken away. No man knows the dark and shadowy future, but we should so order our lives as to be prepared for it. With another at the head of the Coast Survey, this arrangement might not and probably would not continue; and the organization of the Dudley Observatory ought to be so thorough and permanent that were one director to die, the trustees should be prepared to fill his place with another, without deranging the activity of the work. This, as also the idea of accomplishing the maximum work with given instruments, implies a permanent force of observers and computers.

The deliberate and total distortion of my meaning is sufficiently obvious upon the slightest inspection. The Accusers desired to represent me as an intriguer, so meddlesome that I must already busy myself about my successor. My real and evident object was to remind Dr. Armsby anew of the understanding and arrangement of the previous August, in regard to the endowment fund.

(No. 4)

From the "Statement of the Trustees," p. 149.

On the discovery of the Comet, Dr. Gould himself wrote that

"It was a very pretty idea to give the comet the esteemed name of the excellent Mr. Olcott,"

But on more reflection, and probably after conferring with his associates in the Scientific Council, it was found to be "entirely unwar-

What I did write in a Letter to Dr. Peters, 1851, *August* 4.

TRANSLATION.

It is a pretty idea to give to the comet the honored name of the excellent man. But since it is contrary to all my theoretical principles to designate the comet otherwise than by its year and number, you must so arrange it that I do not

ranted by astronomical usage," and Dr. Gould, in his official capacity, as editor of the Astronomical Journal, although of course desirous of gratifying the feelings of Mr. Olcott, felt constrained to strike out the name of Olcott and call it the "*Fourth* Comet of 1857."

appear responsible for it. I am willing to play dissembler a little in the matter.

(No. 5.)

From the "Statement of the Trustees," p. 66.	*From my real Letter to Dr. Armsby.*
So he [Dr. Peters] has had plenty of experience.	"So he has plenty of experiences to relate, and little odds and ends of wisdom, picked up in various corners of the earth."

The object of the alleged citation being to prove that I had indorsed this Dr. Peters, the motive of the slight change made by the authors will be readily comprehended. Their hero must by no means be confounded with Prof. C. A. F. Peters, the great astronomer of Altona, whose "laurels" have been assigned to this other gentleman on sundry occasions by my assailants, but who has not even kindred with him.

3. *Perversions.*—Passing from these illustrations of what for euphemism I prefer to designate by the comparatively mild name of Garbling, I beg leave to add a couple of specimens of what I have called Perversions. Of these there are very many to select from, but two will here suffice.

The first,—which is an attempt to excite prejudice against me,—may be found in the following passage from the "Statement" of the Accusers, pages 32, 33:

"About this time the Trustees were preparing to issue the Inauguration pamphlet. Dr. Gould being very desirous of having it entirely correct, wrote to amend Mr. Everett's spelling of certain names. He also requested, as a personal favor, that inasmuch as his own name was mentioned but twice in the oration, it might be entirely omitted; or if that was not possible, that it should be inserted simply as "Mr. Gould," as he did not desire to be identified in any manner with Mr. Everett, or to figure in the company of Mr. Everett's "heroes." The Trustees did not feel authorized to make any changes in Mr Everett's oration at Dr. Gould's request, which was conveyed in the following letter:

"To-day I saw Mr. Everett's authorized edition of his address, advertised in the papers, and procured one. I had supposed that the Boston edition was for private distribution. Glancing over it, I have seen allusions to myself, by name, twice; once, page 15, and again, page 33,

note—and I will beg you earnestly, as a personal favor, to have it omitted in the Observatory edition, inasmuch as its publication there *would be extremely unwelcome to me.* Will you provide for it, and thus greatly oblige me? If Mr. Everett's *conscience* does not permit him to omit the acknowledgment, page 33, *which I would much prefer*, the *whole* name might, at any rate, be abridged into plain '*Mr. Gould.*' I beg this *earnestly*, for it is *a matter of feeling with me.*

"Do not forget, too, in the printing, that Herchel's name has but one *l* in it. It occurs pages 18, 36, 37, 38, 39, 44, 45. Two of his *heroes*, page 40, also have their names spelt wrong; but the mistakes *will not be recognized abroad*, to the discredit of the Observatory, as the misspelling of Herchel's name could not fail to be."

To say nothing of the meanness of dragging in this totally irrelevant passage, simply to create, if possible, unkind feelings with Mr. Everett,—it is a curious case of perversion of the meaning of a transaction (of the most simple nature, when truthfully stated), by the dexterous insertion of a word here and there; as also of the distortion of an author's meaning by the adroit use of italics. The true statement is as follows: Dr. Armsby had invited me to look to the printing, at Albany, of the Observatory pamphlet, published to commemorate the inauguration, and consisting chiefly of the learned and elegant oration of the Hon. Edward Everett. In the preliminary edition of this oration published for the author's distribution, there were typographical errors, to the correction of which I called attention in a strictly private letter. These are gratuitously called by the Accusers, "Mr. Everett's spelling," and a sneer is thrown at me as endeavoring to "amend Mr. Everett's spelling of certain names,"—not hesitating thus to bring Mr. Everett before the public in a position which they intended should be an unpleasant one, for the mere purpose of making me responsible for it. The distortion of the fact is complete; although, even had the erroneous form in which the names appeared, resulted from an oversight of Mr. Everett himself, I cannot see that their correction by me ought to form an occasion for either sneer or censure. Errors in the spelling of proper names are too common to be considered a very grave matter; and my letter shows that the only anxiety I felt on the subject was, that in a publication for which the *Observatory* was to be responsible, an astronomical name so great and so familiar

in Europe as HERSCHEL's should be given correctly. Again; as a matter of good taste, I desired the omission of my own name in the Observatory edition of the address, the printing of which was to pass under my own eye. This is turned to my discredit by infamously fabricating and inserting in the text, as if it had been written by myself, the phrase, "inasmuch as his own name was mentioned BUT twice!" Motives, certainly not discreditable, are thus perverted into disreputable conceit; and a man who desires to have his name omitted entirely, to avoid parade,—or if it cannot be omitted, to write simply "Mr. Gould" as less likely to attract attention,—is held up as dissatisfied, because his name appears "but twice!" The italics in the letter are not mine, but those of the Accusers; and the letter is most "carelessly" given, the phraseology being changed in several places.

To make an apparent fling at Mr. Everett at my expense, they have also fabricated and inserted the words, "*the misspelling of*," as well as several others, which had no existence in the real letter. It was certainly from no unworthy motive that I desired not to be credited with the very slight and natural suggestion in regard to the date of Keppler's laws, which Mr. Everett, in his conscientious fairness, had mentioned as derived from me. The word "*conscience*" is italicized by the Accusers to give it the effect of a sneer! It is sad that people should exist, who can only see an ignoble motive, in the most simple and well meant actions of men!

But there is still another infamous fabrication of matter and language imputed to me in the phrase,—"As he did not desire to be identified in any manner with Mr. Everett, or to figure in the company of Mr. Everett's 'heroes!'" No more malicious falsehood than this was ever uttered. No candid person, reading my letter by itself, would dream that the word "heroes" was used by me in an injurious or disparaging sense, either towards the persons named, or towards the orator who had named them. It was employed by me certainly without much thought, but as a short, convenient

and rather technical term, while referring to these names for a matter of business. Three of the six names referred to were FRANKLIN, HENRY, and WALKER,—names which I shall hardly be suspected of wishing to treat with disrespect; and it is no disparagement to the two gentlemen whose names were erroneously printed, to say that the spelling of Herschel's name is better known abroad than that of theirs. The name of Herschel is again twice misspelled in the Accusers' version of my letter; but whether from ignorance on their part, or a desire to make me appear ignorant, I will not undertake to decide.

As a matter of propriety, the Scientific Council have taken the liberty, elsewhere, to correct the very extraordinary errors of orthography, in the manuscript copies of Mr. Olcott's Manifesto, and of the Resolutions of the Board, as transmitted to them by Dr. Armsby, Secretary; and they trust that this course may not also be imputed to them as occasion for blame. To have given these as they were sent, would assuredly have exposed the Council to censure, and to the charge of petty malice.

The other illustration of the perversions, which is selected from many equally striking ones for presentation in this place, is an attempt to excite prejudice against Professor Bache, and may be found on pages 22 and 23 of the "Statement" of the Nine, as follows:

"Early in August, the anxiety of Prof. Bache to give to the Observatory in every respect a national character, and to take from it all features of a local nature, induced him to hint at a change of name. "Dudley," was a simple family name; "Albany," a comparatively small city. Neither suited his ambition, which was of course purely of a patriotic, unselfish character, and overshadowed those sentiments of personal gratitude and esteem, which he could not fail to feel for the lady whose name it had taken, and the city whose liberality had raised it up. On the 11th of August, writing to Mr. Olcott, he says:

"I hesitate to make suggestions to you, who have done so much, so nobly, and so wisely in this cause; but I should be recreant to the confidence you have shown in me, did I not ask you to consider the *name* of the Observatory, and all the consequences that may flow from it. The *Dudley* Observatory at *Albany!* You will see *the train of thought* that these names excite, and will follow it more clearly to its *consequences*, with your business precision of mind."

That "train of thought" *was* followed out by Mr. Olcott when, three days afterwards, on the 14th of August, having obtained from Mrs. Dudley the munificent donation of $50,000, he suggested and procured

to be inserted, in her letter to the Trustees, the closing paragraph, which reads as follows:

"For myself, I offer as my share of the required endowment, the sum of $50,000, in addition to the advances which I have already made; and I trust that the *name* which you have given to the Observatory, may not be considered as an undeserved compliment, and that it will not diminish the public regard, by giving to the Institution a seemingly individual character." The Trustees are not aware that any attempt has since been made to change the name of the *Dudley* Observatory, at *Albany!*"

This attempt to infer a slight to the name of *Dudley*, and of *Albany*, from Prof. Bache's letter of Aug. 11 to Mr. Olcott, is a perversion which any clear-sighted person will readily detect without explanation. Still it is proper to call attention to the fact, that here as in most other cases, the quotation is not precisely correct. Dr. Bache's letter did not say:

"Did I not ask you to consider the *name* of the Observatory and all the consequences that may flow from it?"

But he wrote:

"Did I not ask you to consider the name and location of the Observatory and all the consequences that flow from them?"

Only by omitting the words "*and location*," and by changing the last three words of the sentence as written, into the last four of the quotation, could the Accusers maintain their perversion. The truth is as follows:—

This passage is taken from that very letter of Prof. Bache in which he transmitted the letter and schedule of the Scientific Council, stating the sum necessary for the endowment of a first-class Observatory. It was written at Mr. Olcott's special request, in order that he might show it to Mrs. Dudley, and to prominent and wealthy citizens of Albany, for the express purpose of prompting to farther donations. From the letter so inclosed, Mrs. Dudley quotes in her own letter offering her $50,000 towards the endowment. It is a new interpretation by Mr. Olcott that Prof. Bache undertook "to hint at a change of name" (*Qu.* of location also?) of the Observatory. Any sensible man, even though he had not procured the letter to be written, would have inferred from it precisely what the writer intended; and would have "followed out" "that train of thought" precisely as Mr. Olcott acknowledges that he did,

although he evidently intends that his acknowledgement should be taken as ironical.

And did not the letter produce its intended effect? Did not Mr. Olcott use it to prompt farther donations? Does not Mrs. Dudley, in announcing her gift, quote from the official letter of the Council, which this unofficial one of Dr. Bache was written to inclose? To any one who had not examined the whole character of this "Statement," it would be wonderful that its authors could attempt thus to pervert the construction of a letter which Mr. Olcott had himself solicited, and which he so plainly understood when he received it.

With these few illustrations of the Falsehoods, Garblings and Perversions, I dismiss here the unwelcome consideration of so painful a subject. In the Second Part of this Reply, it will be my duty to expose them individually. All present purposes are fulfilled by exhibiting the wicked falseness which pervades and characterizes the book.

There is another point to which, under circumstances of less extraordinary untruthfulness, it would be proper to direct especial attention, viz: the dishonest perversion and distortion of my meaning in the passages which they quote, by the unwarranted use of italics. By a dexterous employment of this means of changing the emphasis, the most unwarranted and incorrect meaning is constantly given by the authors of the "Statement" to their extracts from letters. It deserves the severest reprehension. Truthful and honorable men would be incapable of it. But it is so small a fraud in comparison with others which they have systematically committed that I pass it by, merely adding, what I trust however, it is unnecessary for me to add, that in the passsages cited in the Reply, no italics or capitals are either inserted or omitted, unless the reader is especially informed of the circumstance.

CHAPTER IV.

OBSERVATORY RELATIONS AND HISTORY PRIOR TO THE YEAR 1858.

It is of course necessary to afford the reader a clear understanding, both of my personal relations towards the Trustees of the Observatory, and of those of the Scientific Council.

The nature of these relations, previous to the compact of December, was essentially different from that subsequent to this date; and though the latter period was broken in upon by the violation of faith on the part of Mr. Olcott, particularly in the transaction of the 9th of January, 1858, it may yet be treated as a whole, as regards our true relations, and the transaction referred to be considered by itself.

As already intimated, the plan of this Reply contemplates, in the First Part, remarks general in their nature, and, in answer, not so much to the individual accusations and misrepresentations of the "Statement of the Trustees," as to the spirit of their pamphlet, and their really important charges. In the Second Part I propose to give a full, detailed and satisfactory reply to their book, page by page, and point by point, in order that none, not even the most trivial, of their false accusations be left unanswered.

I therefore proceed to a narrative of Observatory affairs prior to December, 1857, and to an explanation of the position which the Scientific Council and myself occupied in reference to the institution during the period which closed with the compact of December. This being done, I propose to offer a similar history of affairs since that time.

My first knowledge of an Observatory in Albany, was conveyed in a letter from my friend, the late Sears C. Walker, written in October, 1852, from which I make the following extract:

CINCINNATI, Oct. 21st, 1852.

"Mitchel, ——, and myself telegraphed to you to come on at once to Cincinnati. We have had no answer, or had not yesterday.

"I will now put the whole matter of the Albany Observatory before you. The Albanians have had an intention of getting up a great central university, with an Observatory. To the best of my knowledge the plan of a great university is abandoned for the present; the Observatory design is persevered in. They have subscribed a fund of $25,000 for the purpose. Mitchel, you know, has been very active and influential in lecturing and urging this scheme, intending to have an honorable and lucrative post as its Director. I believe he has been chosen already, and accepted. In short, a good portion of the subscriptions, not yet paid in, are solely on the condition that Mitchel shall have charge of it. Mitchel cannot resign the nominal directorship without releasing these subscribers of the fund from paying up their instalments. Such is the present plight.

"Meanti.ie, our friend Mitchel, not content with being the Director of two Observatories, half a thousand miles apart, must also engage as engi-

neer and financial agent of the Great Cincinnati and St. Louis Railroad, one of the most extensive in the United States. Having thus three strings to his bow, he has concluded, very wisely, to use the strongest and turn engineer, for a year or two, and sink the astronomer. For this purpose, and to relieve himself from the active duties of the Albany Observatory, he has gone to Albany, and informed them of the impossibility of his giving them his personal labors for a year or two; yet he must retain the *nominal* directorship, in order to clinch the subscriptions. The question now came up of appointing a working man, to reside at Albany, and do Mitchel's active duty. He agreed to waive all claim to pecuniary compensation in favor of the working man. The Albanians then fixed the compensation of the working man at — per annum, commencing on appointment. The next question was the selection among the candidates. The Albanians recommended two persons; I believe both from ——. One is our friend, Mr. ——, who is a fine scholar and mathematician. . . The other candidate, I forget his name, is unknown to astronomy. Mitchel immediately vetoed both these astronomers, nominated you, and said that if the —— men were appointed he would leave the establishment altogether. He believed them very respectable scholars, but not *the* men for this enterprise. The Albanians agreed with Mitchel, and the letter written to you by Mitchel was in their presence, and with their cordial approbation.

"Now, my friend, I have thought the whole matter over, and if I were of your age, I would accept. You will be Director *de facto*, at once, and *nominally* in a year or two after the subscriptions are paid. You may rely on it, Mitchel will never act as its Director, and only waits to see it organized, and resign. Your pay,—at first, will, I presume, be raised; for the Albanians are determined to do something handsome. I have no doubt but that the Legislature will lend a helping hand. It is the best opening now in the country before us. Mitchel wishes a personal interview with you here, that we three may decide upon the plan of the building. I have no doubt that our plan would be adopted by the Albanians, and the work would commence on a proper system.

"Mitchel gave them a ground-plan for the building, and they employed an architect to make drawings for the superstructure. This, though architecturally beautiful, is not astronomical, convenient or useful, and must be rejected, and the wants of the astronomer not postponed to wishes of the architect. I should, on this account, be glad of the interview. Mitchel goes to St. Louis on Monday next, for a fortnight, and will be in the field on the line. Unless you move in the matter there is danger that Mitchel will give it up, and that the Albanians and their appointee will almost spoil it."

Although of course gratified at the indications of regard and confidence thus manifested by Messrs. Walker and Mitchel, I was unwilling to accept the invitation, which was subsequently renewed by Prof. Mitchel more than once. Towards this gentleman my relations have always been of the pleasantest and most friendly character, and I am not aware that a breath of suspicion of unkindness had passed between him and myself, previous to

the astounding declaration of Mr. Olcott in June, that my "personal relations" were "such as to preclude the hope of concert and co-operation" with him. I had hoped that he would feel called upon publicly to contradict this false assertion.

In declining the invitation of Prof. Mitchel in 1852, and the still kinder one in August, 1853, in which he intimated his friendly readiness to resign in my favor, I was influenced simply by strong individual preferences, these motives being the same in February last, as they were six, five and three years ago. They would have been disregarded at the call of duty to my science, and not otherwise. Only when the preservation of the Observatory as a scientific institution hung upon the issue, did I decide to adopt a new home for the sake of averting what I regarded, and still regard as a national calamity—the degradation of a prominent and representative scientific institution, from an object of solicitous care into a means for unworthy private ends in the hands of a few persons, to whom the state by unwitting legislation committed it, as a trust.

In the autumn of 1854, overtures were again indirectly made to me; coming this time, not from Prof. Mitchel, but from the active Trustees, as I supposed then and believe now, though conveyed to me by a common friend. These overtures led to a correspondence, which,—although the letters were not marked either "private" or "confidential," and would certainly not help Mr. Olcott and his co-adjutors before the public—I will not publish. Were it my custom to betray confidence, the temptation might be strong. But I will only make one quotation, and from a passage in no way confidential.

A letter written 1854, Dec. 8, to me in Columbia, S. C., transmitting a ground plan of the Observatory, furnished by Dr. Armsby for the purpose, says:

"I believe every thing has been done as well as it could be done, without an astronomer to superintend it. . . They will give you the Observatory and seven acres of ground *in fee*, if you will come here and live."

This flattering offer was declined with many thanks, and an avowal of my unwillingness to give any pledge to remain for any stipulated term of years.

In the ensuing April (1855), the subject was again brought up with many details. I was informed that Prof. Mitchel had again visited Albany, but had afforded no real encouragement for the hope that he would take personal charge, although he had decided to transfer his residence to the Eastern States. My reply was the same as before.

In August of the same year, during the meeting of the American Association for the Advancement of Science, the agent of the Trustees of the Observatory (Dr. J. H. Armsby) approached Professor Bache, and, in the plausible and smooth way for which he is noted, described to him the stagnant and effete condition of the Observatory enterprise, and the good which might be done, if he and others would take an interest in its scientific direction. Professor Peirce, who was engaged upon the problem of longitudes by occultations, and who had called Professor Bache's attention to the use of the Pleiades, renewing the recommendations of Walker and of Bessel, advised the use of a Heliometer for triangulating the Pleiades, if one could be procured. Dr. Armsby undertook that means should be raised for this purpose. Professor Bache requiring some guaranty in this matter, Dr. Armsby went to Newport to find Mr. J. V. L. Pruyn; and at a later day gave Professor Bache the impression that this gentleman had given such a guaranty, not of course in its commercial sense, but a declaration of his conviction that the money could and would be raised. Upon this Professor Bache agreed to furnish a transit instrument, *from among those in use in the Survey*, and an observer for the Heliometer. This promise in so many words is in writing, and fulfilled in advance, although the Heliometer has not yet been provided. And now the President of the Trustees has actually applied to the Secretary of the Treasury, at Washington, to order the transit instrument mounted at the telegraph station, the instrument promised and furnished by Professor Bache, to be removed. He has also applied for the removal of the larger instrument which is in the Observatory building. His letter is on file in the Treasury Department.

The attempt to make this appear as an official connection between the Coast Survey and the Dudley Observatory, is very forced. As well might it be alleged that the Coast Survey is connected with the Cambridge Observatory because Mr. Bond reports the occultations and moon-culminations observed by him, or with the Cincinnati Observatory because Professor Mitchel does the same! In fact these latter-named arrangements are the closer, for observations are actually furnished and paid for by Coast Survey funds, and in the case of the Cambridge Observatory, have been so for years; whereas the heliometer is yet uncompleted, and no observer has therefore been needed under this agreement.

There was still another way in which the Observatory might be made useful to the Coast Survey, and the Survey thus be warranted in aiding the Observatory. The accurate determination of its position might be made extremely serviceable for the geodetic triangulation of the Hudson river, which is in progress under the Coast Survey; and it was thus in the power of the Superintendent to render great aid to the young institution, by selecting it as a point of the triangulation of the upper Hudson, and by determining its position, in order to connect this with the lower work. As preliminary to this, he authorized me to station an aid in Albany, who, while carrying on other and independent Coast Survey work, should make, under detailed instruction, an approximate determination of the geographical position of the Observatory, watching at the same time the general progress of construction to see that no serious mistake was committed. Upon my application the Superintendent attached Dr. Peters to my party for this purpose; and he was provided in 1856 with the promised transit-instrument, and with a zenith telescope for making these observations. They were made by him and paid for; but he has not delivered them, although the property of the United States. The question arose, at one time, whether a proper sense of official duty did not require that he should be compelled to surrender them; but it was judged, upon examination, that the work could be reproduced at less trouble than would be occasioned by an enforcement of the laws.

As the relations between the Coast Survey and the Observatory have been made the subject of much elaborate mystification, and as the very men whose enterprise the Superintendent was thus anxious to aid, by every legitimate means, have in their anger and malice now caused him to be publicly attacked for having aided them, it has appeared well to give a plain statement of the case.

Even these relations were materially modified by the compact of December, although the Managers caused the majority, in ratifying this compact, insidiously to insert language which might imply that some official connection existed. This interpolated language, although then supposed by Prof. Bache and myself to have been the result of carelessness rather than fraud, rendered a distinct disavowal necessary upon the part of Prof. Bache, who made the following statement to the Scientific Council at the meeting in Philadelphia, Feb. 6, 1858.

"Prof. Bache stated that, in his capacity of Superintendent of the U. S. Coast Survey, it had seemed to him possible, by stationing the Telegraph party at Albany, (where their duties could, as far he was at present advised, be satisfactorily executed,) that he could afford the incidental facility of the services of the Chief of the party as Director of the Observatory, and of his aids as assistants, to be given at such time and in such manner as would not interfere in any degree with the time to be employed as officers of the U. S. Coast Survey;—that he could make the longitude observations required by the State of New-York for connecting the Dudley Observatory with New York city, and also by the Coast Survey for connecting the stations of triangulations of the upper and lower Hudson, the expense being borne by the State of New York, and the work done by the salaried officers, and by the instruments of the Coast Survey; and that when the Dudley heliometer was completed, the use of it might be mutually beneficial to the Observatory and the Coast Survey, in triangulating the Pleiades with reference to their use in longitude determinations,—an investigation equally important to the progress of Astronomy, and to the execution of the law relating to the Coast Survey;—and that he was desirous in this and every other proper and lawful way, and also by giving any portion of his time, knowledge, or effort, not required in the discharge of his official duties as Superintendent of the Coast Survey, to advance astronomical science in the United States.

This statement (the same in substance as that given by Prof. Bache to the Trustees, at their meeting in January, previous to their vote of ratification) was ordered by the Council to be placed upon their minutes. A resolution was passed, putting upon the records of the Council the fact, that the written acceptance by Dr. Bache of Mr. Olcott's proposition was made by him as that

member of the Council to whom the written proposition had been addressed, and had no relation to his capacity as Superintendent of the U. S. Coast Survey; and Prof. Henry was appointed a committee to call the attention of the Trustees to the proceedings of the meeting.

Yet these men now endeavor, on page 50 of their so-called "Statement," to make me appear guilty of falsehood, because I said *in November*, 1857, that I "regarded the Observatory as in the hands of the Coast Survey," and *in June*, 1858, denied that there was then any official connection between the two institutions. And they do it, too, in the face of the exposure of this identical falsehood of Mr. Olcott, which is made by the Council in § 23 of the "Defence."

The labored attempt to give apparent complication to those very simple relations, has led me to dwell upon them in more detail than would otherwise have been the case, in order to preclude all possibility of farther misrepresentation; although it has thus become necessary to anticipate in some degree the regular course of the narrative.

The original arrangement with Prof. Bache, was made on or about the 22d day of August, 1855, and after repeated consultations with Prof. Peirce and myself. Meantime Dr. Armsby (with whom I then first became acquainted), appealed to me with great earnestness to undertake the charge of the Observatory, in the two-fold capacity of a Coast Survey officer, under this arrangement, when the Heliometer should have been provided; and of Director of the Observatory under the the Board of Trustees, receiving salary in each capacity. This complimentary proposition I declined. He also appealed to Professors Bache and Peirce to use their influence with me in aid of this project; and I consented ultimately to render every assistance consistent with other duties, towards fitting the Observatory for usefulness, with the understanding that this aid was to be unofficial and gratuitous, and upon the express condition that no such services should be regarded as implying any promise whatever, that I would ever move to Albany.

Soon after returning home from Providence I received, at Cambridge, from Dr. Armsby, in Albany, both by letter and by

telegraph, an earnest entreaty to visit Albany on the ensuing day. Prof. Henry, then on a visit to Cambridge, consenting to accompany me, I replied in the affirmative, and thus visited Albany for the first time on the 3d of September, 1855.

Dr. Armsby received us at the railroad station and conducted us to his house, where we found a company already assembled, consisting, as we were told, of the Trustees and friends of the Observatory. Without opportunity to rest from the long journey of ten hours, we were soon ushered into the meeting, and, after half an hour passed in general conversation, were requested to address the company, and after much persuasion, reluctantly complied. Prof. Henry spoke of his gratification at re-visiting his birth-place to take part in steps preliminary to establishing a scientific institution, and encouraged his hearers to the good work, in which he would be proud to aid them to the best of his ability. I described the nature and use of a Heliometer, and of a Meridian-circle, and spoke at length on the importance of accurate, careful measurements rather than of the contemplation of physical peculiarities, provided the object in view was the advancement of astronomy. I dwelt upon the natural popular tendency to mistake the purpose of an Observatory, and to attribute importance rather to those results which excite the emotions, than to the careful, toilsome, but less showy labors upon which the furtherance of science is entirely dependent. If these Trustees now complain that I have sought to make the Dudley Observatory a place for careful, unostentatious investigation, rather than an exhibition of brilliant-looking instruments and curious contrivances, they cannot complain that they were not warned in season of my views.

Our remarks were followed by addresses from citizens of Albany, and great enthusiasm seemed to prevail. A number of gentlemen retired to an inner room, where they remained for some time. This being the first occasion upon which I had seen or known them, their names and persons are not now within the reach of my memory; but three of them I distinctly remember as being among the present Trustees. After the lapse of some little time these gentlemen re-appeared, and we were told

that a meeting of the Board had been held, and that Messrs. Henry, Bache, Peirce and Gould had been elected the Scientific Council of the Observatory. Subsequently, on another occasion, the record book of the Trustees was shown me by the secretary, Dr. Armsby, with a formal record of the meeting, and of the appointment of this Scientific Council. Twenty-eight months later, it was discovered that this appointment had been "informal," and the Board in pretending to ratify and confirm the election of the Council availed themselves of the opportunity to pass a series of resolutions, upon which the present theory of an entire change of their functions might be based, by declaring the Council a purely "advisory" corps,—no longer the Scientific Council of the Observatory, but the Scientific Council *of the Trustees*!

Is it imagined or pretended that the four members of the Council would have pledged themselves for the proper conduct of the institution; staked their reputations on its success, and labored with such increasing assiduity, if their functions were "purely advisory," and the Trustees were at liberty to reverse and cancel all their acts and thwart all their plans? The very statement of the case shows how untenable is such a hypothesis. The time and energies of these men were not to be consumed in such hopeless labors.

No, the functions of the Scientific Council were from the first distinctly defined, although we unfortunately demanded no written bond. They were proposed by Dr. Armsby, indorsed by Mr. Olcott, continually reiterated by both of these gentlemen for more than two years; unhesitatingly and confidingly accepted by the members of the Council. The financial affairs were to be in the hands of the Trustees; the scientific affairs in the hands of the Council. When told that the Board was in session, was it for us to inquire whether the members had been regularly notified? When told that we had been elected Council, and that our functions were distinctly prescribed, was it for us to inquire whether our informants, whom we saw exercising complete authority, and whom we had no reason to distrust, were speaking the truth? When invested with cer-

tain authority by these men, were we to doubt their right to confer it and investigate the laws of the State? Was it for us to demand the written bond, when we had the plighted word, of men whom we supposed honorable and true? Yet the Managers claimed in January, 1858, that our appointment in September, 1855, had been informal, that the alleged meeting of the Board at that time was unreal; and in professing to "ratify and confirm" this "informal appointment" they undertook to declare our functions purely "advisory." By thus asserting their own deeds to have been illegal and unauthorized, although for more than twenty-eight months they had not only allowed us to believe them correct, but had themselves plainly acknowledged them such,—they attempted to make this alleged past illegality or informality of their own a means of abridging the powers bestowed upon us. But since, by another resolution of the same series, passed at the same meeting, the Observatory was placed anew under the supervision of the Council, it was, for reasons already stated, deemed unadvisable to take exception to the language. I may add in passing, that even the language of these resolutions seems to have been since altered by the authors of the "Statement" to make their own case appear stronger.

I have strong and convincing reason to believe that the resolutions and acts of the Board, and of its Executive Committee have more than once appeared upon the records in a very different form from that in which they were passed by the meeting; and it is by no means certain that the record of the appointment of the Scientific Council, in September, 1855, now stands upon the books of the Trustees.

And now, notwithstanding the constantly renewed and continually reiterated protestations of Messrs. Olcott and Armsby individually, and as the supposed Executive Committee, clothed, as they said, with full powers, that the scientific operations were and should be exclusively in our charge and control, and the financial operations theirs alone; notwithstanding the whole series of acts, official and otherwise, by both parties, all based on this agreement, they have endeavored both to deprive

us of the scientific management, and to hold us, or rather myself, the accredited representative of the Council, responsible for the financial mismanagement, as well as for the delays in execution. The endeavor is preposterous and futile.

We did not solicit our appointment, and were induced to accept it only on the repeated assurances of the Executive Committee of the Board of Trustees, that the money could be raised if we would lend our names to the project, and that we should have the entire scientific management of the Observatory. We had no personal interest in the enterprise; our time and thoughts were sufficiently occupied with the duties of our respective offices: on the one hand, little honor could accrue to us individually from the appointment; and, on the other, we were liable to the censure which might result from a failure. Our only reason for engaging in it was a desire to advance the science of our country, and especially to assist in promoting that branch of science in which we were personally interested. We were not willing to engage blindly in such a scheme; for we knew, by experience, the uncertainty which attends efforts of this kind, especially in the United States; and we feared new illustrations of the tendency to undertake great projects without due consideration, and of the ease with which great promises may be followed by small performances, or, indeed, by entire failure. We were well aware of the injury to the cause of knowledge which such abortive attempts inevitably entail, not merely by involving the loss of time and thought, and the misdirection of money, but by occasioning a loss of public confidence in the possibility of establishing and creditably maintaining institutions of this class.

We stated, therefore, to the committee who made us the overtures, that the funds requisite for the mere completion of the building and purchase of the instruments were by no means sufficient, but that means ought to be provided for an annual income of twelve thousand dollars for the support of the astronomers and other necessary expenses of the Observatory, and that the annual outlay could be restricted to ten thousand dollars, only by means of close economy and gratuitous aid. In

reply, we were informed that an excellent beginning had been made, an appropriate site presented by Gen. Van Rensselaer, a building erected, and that it was positively certain, that, by the aid of our names and influence, the endowment could be fully obtained. Placing entire confidence in the representations of gentlemen who gave us these assurances,—relying upon their standing, their financial ability, and their unwearied industry,—we yielded to their solicitations; we embarked with trustfulness and zeal in the undertaking, and gave the Trustees our hearty and united co-operation. Although they gave us no formal record of our appointment by the Board of Trustees, nor any written notification of the terms on which it was conferred, yet it was stated by the Executive Committee, repeatedly and from the first, and was distinctly understood by us, that we were to have the entire scientific control, while they were to furnish the necessary means, and to have charge of the financial affairs. It was on these conditions alone that we could in any way have connection with the enterprise, or encourage it. We were confident, from our experience in scientific matters, that if sufficient money could be provided, and the scientific control of the Observatory given to us, we should be able so to direct it as to produce results of acknowledged value in astronomy, which would confer honor upon the city of Albany and the whole country. Though, from their late declarations, and still later acts, the Trustees have denied all this, I assert it in the most emphatic manner.

It is due to myself and to my associates in the Scientific Council to say that in the commencement and continuance of our early intercourse with the Trustees of the Observatory, we did not suppose ourselves required to use commercial suspicion or caution in our dealings with them. The maxims which govern the buyer and seller were apparently unnecessary for our case. We did not imagine that any difference of interest could arise, or that it was possible that the shrewd cunning of practical men of business could be employed against us. We trusted to the honor of those we thought our friends, and implicitly placed ourselves in their hands. We are now fully aware of

our error in this respect, but willingly leave "the Trustees" all the advantage they can derive from their sharp practice.

Should this statement not be regarded as sufficient, I beg to refer to the evidence which will be found by reference to the Second Part of this Reply.

Within the next ten days after my first visit to Albany, I had consented, at the urgent instance of Messrs. Olcott and Armsby, (not "offered" as the Accusers falsely allege) to visit Europe to contract for the construction of the heliometer and meridian circle. My leave of absence was of course at the discretion of my superior officer, Prof. Bache, and—far from applying for it,—my consent, contingent upon his approval, was given with the distinct and sincere expression of the belief that this approval would not be given. It was given upon the application of Messrs. Olcott and Armsby; and in compliance with my promise I went,—leaving home, Sept. 21, provided with authority and means from the Trustees to contract for a heliometer, a meridian-circle and a clock, although, after full consideration, I did not enter upon any contract for the first-named instrument. Apart from the time, thought and study which the proposed modifications of the instruments cost, I devoted three months to the expedition, and on my return asked and received only such portion of my expenses as seemed to me the simple equivalent of the necessary cost of the passages and journey, without including my extra expenses of travel and living abroad. The time was of course considered as part of my contribution to the Observatory.

The Accusers in their narrative say, pages 11 and 12:

"It is but justice to state that these expenses were commendably moderate, being scarcely one hundred dollars more than the expenses of Mr. Gavit or Mr. Spencer, who afterwards spent the same time in Europe, and traveled over the same ground, at the charge of the Trustees."

Were this indirect fling based upon truth, how ungrateful it would be! But it is as false as it is contemptible. (See Part II, § 13.)

In this connection I must also call attention to one mis-statement of the Trustees, repeated directly or impliedly many

times throughout the book, viz: that the Meridian-circle is the gift of Mr. Olcott. To support this mis-statement, the majority of the Trustees have, in a second edition of the inauguration-pamphlet published in June last, so mutilated my address as to make me assert the same.

On the 30th of December, 1855, I reached home again, and within two days hastened to Albany to give account of the results of the expedition, which met the strongly expressed approval of Messrs. Olcott and Armsby. In addition to this detailed report to these gentlemen, I afterwards gave as full an account as possible, at a large social gathering of the friends of the Observatory, assembled at Mrs. Dudley's house, and announced at the same time that the construction of the Heliometer would be intrusted to Mr. Spencer, of Canastota, a decision at which Mr. Olcott, Dr. Armsby and myself had unanimously arrived a few hours earlier.

Official duties and engagements of long standing, the fulfilment of which had been delayed by the European expedition, compelled me to visit the Gulf Coast without delay, and to remain in New Orleans until the close of March. Before leaving Albany, I assured Messrs. Olcott and Armsby of my continued and earnest co-operation, cordially and gladly rendered in the stead of pecuniary contributions, and promised to guide and direct, to the best of my ability, the preparations of the building and the organization of the institution. With these assurances, however, was coupled the condition, previously insisted on when leaving for Europe, that no amount of labor or exertion on my part should be interpreted as a pledge, however implied or indirect, that I would assume the ultimate guidance and directorship.

To this they gave ready assent, and subsequently, from time to time, this stipulation was made and acknowledged anew; as frequently, indeed, as seemed possible, without trenching too far upon the boundaries of modesty and delicacy. It was farther distinctly understood between the supposed Executive Committee and myself, that my province was to point out the scientific needs and requirements, the adaptations necessary

for the building, the construction of the necessary apparatus and fixtures, while all matters of a financial character were to be assumed and taken in charge by them, both as regarded the raising and the disbursing of money, and as pertained to limits of proper and warrantable expenditure. My mental constitution precluded me from joining them in their honorable efforts toward the raising of money, a labor which, under the circumstances, could by no means properly devolve upon me; for the expenditures, I assured them that practical financial skill and presence upon the spot were alike desirable. The force of these views was felt by the Managers, and they fully acceded to this understanding.

Lastly I made the urgent request, as a personal favor, that, other than as one of the four members of the Scientific Council, my name should not be brought prominently forward in connection with the Observatory, farther than might be requisite to insure full responsibility for the proper fulfilment of the duties undertaken and obligations incurred; inasmuch as such prominence without a public disavowal might easily be construed into an implied pledge to assume the full charge of the institution when ready for actual operation. This request met a cordial compliance; and since that date my time, efforts, thoughts, faculties and purse, have been at the service of the Dudley Observatory, without measure or stint. Whenever it was intimated that my presence in Albany would be desirable, I instantly hastened thither; and in the absence of such intimations was there as often as opportunity permitted.

The Observatory building had been constructed with a view to work of a different class, and upon a different scale, from what was now contemplated. Moreover, before any instruments could be mounted, it would be necessary to place the large piers upon which they must rest. Shutters of elaborate and difficult mechanism were rendered necessary by the large size of the meridian-rooms. Collimator-piers were needed for the Meridian-circle; and the contour of the grounds on the north and south, and the elevation of the main floor of the building, precluded any idea of placing them in separate structures with-

out great expense, as well as danger of unsteadiness. Appliances for rotating the heavy dome were necessary; and the construction of machinery for opening and closing it offered a problem of extreme difficulty. The setting of the piers themselves with the needed precision could only be accomplished by means of contrivances planned for the purpose. Besides all this, were to be devised and constructed apparatus for indicating uniform sidereal time throughout the building, for the chronographic registration of transits, for the adjustment of mean time, and for giving telegraphic time-signals to railroads and distant cities. The plans for the heliometer were to be decided on, after Mr. Spencer should have prepared the material; books were to be provided and all the other necessary apparatus and implements of labor devised.

The first practical step was the preparation of the room in the east wing, designed for the reception of the Meridian-circle. The telescope of the Circle being 10 feet long and the room itself but 23, so that there would not be room enough to take out the telescope for reversal, I decided upon a semi-circular addition of six feet radius on the south, and a bow upon the north as nearly similar as the structure of the building allowed. These additions would give to the room a meridian length of 35 feet, allowing space for collimator-piers, and ample room for reversing the circle. On the other hand the difficulty and expense of arranging the shutters for the meridian-apertures would be greatly augmented. In this connection I endeavored to impress upon the gentlemen in charge that symmetry in an edifice was not indispensable for elegance and grace; cited the strongly expressed opinion of the Astronomer Royal of England that attempts at symmetry were especially undesirable in an observatory; and, among other reasons, showed that every new instrument would require some addition or modification to the structure and that these could be freely made only when no considerations of mere symmetry tended to interfere with the purely scientific end desired.

In spite of these strongly urged views, the unnecessary semi-circular addition to the west wing was insisted on; and

despite the protestations of the assistant, whom, by permission of the Superintendent of the Coast Survey, I had stationed in the building in July, 1856, the rear walls of both wings were immediately torn down, and the curved additions on the north subsequently built to both. The demolition of the north and south walls of the west wing was not only in opposition to my appeals, but without my knowledge until beyond remedy. It would of course have been necessary to break through some part of the wall at some time, in order to introduce the piers; but this would have been but a small piece of mason work comparatively, and soon completed. The north and south walls of both wings were taken down in the month of July, 1856, and the rooms long remained entirely open to the weather. The west wing was closed about the end of the year, and the east wing presented the aspect of a ruin until the circle-piers were set, in February, 1857. Of course I had not allowed so utter a disregard of my wishes and views to pass without protest, but had energetically remonstrated and called attention to the fact that I should doubtless be held responsible by the public. My remonstrances and complaints were addressed to that one of the Executive Committee, (Dr. Armsby), who gave his immediate attention to matters of executive detail. He assured me that the error was due to misunderstanding on the part of the mechanics employed, and begged me to dismiss the subject from my mind; since, however wrong the proceeding might have been, it had arisen from misapprehension only. I pointed to my letters, reminded him of my remonstrances, of the fruitless interventions of my assistant, &c., but yielded ultimately to his earnest appeals to let the matter pass without farther remark. Above all he begged me not to mention it to his colleague, (Mr. Olcott), who was busily occupied with weightier matters in behalf of the Observatory,—since he being nominally, as Dr. Armsby expressed it, though not actually responsible, it would be a source of annoyance to him. Farthermore, it was most desirable, he said, that I should make no public disavowal, since this would interfere with the interests and prospects of the Observatory, by rendering citizens unwilling

to contribute to an institution in danger of suffering from divided counsels. To these solicitations I yielded. Subsequently I found reason to believe that the changes had been made at the instigation of the identical person who had made these urgent appeals.

Meantime the plans, for the different parts of the building and its machinery, went on. It was my good fortune to enlist in the enterprise the ingenuity of Mr. Hodgins, then assistant in the office of the architect, but whom the Executive Committee authorized me to employ independently in behalf of the Observatory, and whose fertility of invention and knowledge of engineering have been of the highest service.

The ceremonies of Inauguration of the Observatory took place at the close of the session of the American Association for the Advancement of Science, in August, 1856, and are still fresh in the memory of the friends of the institution.

I will not dwell upon details, but may allude in passing to a single experience more, as illustrative of many others, and capable of aiding the reader to understand the nature of my relations, and the character of my embarrassments. When the large piers for the circle arrived, which was only after long delay and continued importunity, it was discovered, not only that their form was not in conformity with the plans furnished by me, but that a corner of the base of one had been broken off, bolted on with metal, and the seam concealed by a cement of the same color with the stone. When or how this took place, or who is responsible, I did not know until very recently. In opposition to my earnest advice, these piers were accepted and paid for. It was of course impossible to make the broken one available;—I was informed that the owners of the quarry declined to contract for another, until they should have actually found a stone of the size and form desired;—winter was close at hand, the Observatory open and exposed, and the end walls of the wing entirely without other support than their own cohesion; and it was therefore decided to order the piers from another part of the State. Another quarry was found, of stone, which though not equal to the former, was adjudged satisfactory

after consultation with an eminent geologist of Albany, as to its lithological character. The circle-piers were finally placed and the closing of the walls commenced, in March, 1857.

These illustrations are given merely as specimens of the annoyance and trials to which I was continually subject, but which for the sake of the institution, I concealed from all except the Scientific Council and one or two of my other trusted friends.

Thus the work dragged on. There was no urgent need of haste on account of the scientific operations, since it was a matter of agreement that the activity of the Observatory should not commence until a proper endowment had been secured; and, far from this desirable and important end having been attained, all the donations except Mrs. Dudley's large one seemed, so far as I could ascertain, to be expended nearly or quite as fast as made. My remonstrances were necessarily clothed in a somewhat delicate form. As one whose labors for the Observatory had been neither small nor few, as one who had made large sacrifices of personal interests to the welfare of the institution, as one who against his earnest efforts had been publicly brought forward in connection with the new enterprise, and who could not fail to be considered more or less responsible before the world, I had the right to remonstrate and it was my duty to do so. But from all other points of view, such an interference with the functions of the Executive Committee would have been officious in the extreme. Messrs. Olcott and Armsby were seemingly entitled to reply,—as the latter did more than once,—that I was forgetting my legitimate province, and that such considerations were for them, not for me. But I did remonstrate and protest most earnestly against the continual violation of the plans which I had laid out, and the constant disregard of my directions in my absence;—a disregard which convinced me, at an early date, that the empty dazzle of temporary show was, in the wishes of the managing Trustees, paramount to any ideas of scientific usefulness or dignity. My appeals were responded to by promises, but followed by no real change of policy. Finally the plans, drawings and directions being complete, I abandoned early in the summer of 1857, all attempt at supervision of their actual execution.

These protests on my part formed the only interruption of "Harmony" which occurred in any form, however slight, prior to November, 1857. With Mr. Olcott there was no such interruption, and though Dr. Armsby manifested some impatience once or twice at my attempts to check his course, I regarded this impatience as natural to a man of his temperament, and as being essentially short-lived. Not till sometime afterwards did I suspect that his impatience of control was accompanied by a deep-seated rancor, which permitted no forgiveness of any who might attempt to restrain his crude schemes—schemes as absurd in point of judgement, discretion and economy, as they were fantastic and opposed to every principle of good taste.

The first real discord was manifested in November, 1857. Prof. Bache having in June, 1856, decided that the Observatory should be a station in the Hudson River triangulation, and authorized me, as already related, to station one of my aids there, and having at my request attached Dr. Peters to my party, that I might be enabled to detail him for this purpose,—I had in July stationed him in Albany, where he was charged with a divided duty between Professor Peirce and myself, in the Coast Survey service. Under the direction of the former he had a series of occultations of the Pleiades to compute, while he was intrusted with various measurements and determinations under mine. For more than a year he resided at Albany for this purpose, until—his functions being in a manner fulfilled, and it being desirable that his work under Professor Peirce should be under more thorough supervision,—he was detached from my party again, that he might resume his original position at Cambridge. Dr. Peters resented these instructions in an offensive manner; and, finding the Superintendent indisposed to accept the dictation of a subordinate, resigned his position upon the Coast Survey in anger. Application was immediately made to me by Mr. Olcott to appoint him to a position under me in the Observatory, independent of the Coast Survey, but of course I declined doing so under the circumstances. Professor Bache was appealed to, to permit him to recall his resignation, but declined taking any step unless Dr. Peters would signify a willingness to obey orders. This

led to a protracted correspondence between Mr. Olcott and Professor Bache on the one hand, and Mr. Olcott and myself on the other; during which it was discovered that Dr. Peters had been ambitious of securing to himself an independent position in the Observatory, by which it was to be diverted from its grand design to those more showy uses which Messrs. Olcott and Armsby so much desired; and—in conjunction with Dr. Armsby, who was restive under my constant though gentle opposition to his wild and crude schemes, and who was therefore in the mood to co-operate with him—had for a long time been engaged in a series of intrigues for the accomplishment of his object.

Dr. Peters was deeply bound to me by every tie that can bind a soul susceptible of gratitude. He was much older than myself, and had never been made to feel the relations which generally exist between subordinate and principal, in the arbitrary assignment of duties and giving of orders. I had refrained from any allusion even, to circumstances in his past career with which I assumed that he knew me to be acquainted. When a stranger and destitute, I had received him in my home, although no bond existed but a three days' acquaintance, ten years ago; had provided him with occupation, both official and private,—the latter more than liberally compensated; had reposed in him implicit confidence, and trusted my cherished plans to his keeping. That he could knowingly injure me, whatever the temptation, I held to be among the impossibilities. It is true I received warnings from numerous European friends who were acquainted with his past career, among them men of position unsurpassed among living scientists,—men whose names would surprise the reader, were it pardonable in me to betray the confidence which they have reposed. But in my simplicity I believed these men to be mistaken and prejudiced, and Peters to be the injured victim which he loved to portray himself. The Truth dawned upon me very slowly, for I was unwilling to receive it. Loyalty to the service in which I was engaged, precluded me from rewarding disaffection and insubordination; discretion forbade me to trust the man farther; propriety and

duty alike withheld me from exhibiting to other assistants an example of faithlessness successful, and the authority of our own official chief insulted. Despite continued importunities, I refused to appoint him assistant, if other Coast Survey employees were to be brought in contact with him. This refusal was followed by a series of most offensive, bitter and calumnious attacks through the Albany papers, anonymously. I disregarded them except so far as to investigate their authorship, which I found reason to attribute to the joint efforts of Messrs. Peters and Armsby. Dr. Peters's connection with the Coast Survey had ceased; yet he still remained in the Observatory building, where a room had been provided for him, at my request, more than a year previous.

At this stage of the matter I visited Albany about the middle of December, 1857, and held a long conference, December 18, with Mr. Olcott. He referred to what he called an "outside pressure" in favor of Dr. Peters, and urgently insisted upon his appointment. He also told me that the funds of the Observatory had become so impaired that even the donation of Mrs. Dudley had been seriously encroached upon; that the income of two or three years would be needed to restore it to its original amount of $50,000; that the other donations had been mainly expended, and that the Observatory would be dependent for the coming year upon the appropriation of $2000 made by the Legislature for determining the longitude, which sum had been promised to the Trustees; that this appropriation was absolutely secure, whole and available, having been intended by the Legislature as a contribution to the Observatory, and obtained avowedly for this purpose; and that it could be drawn at any time he desired, provided that the good will of the Regents was retained; that no immediate determination of the longitude was necessary, but that the law would be so construed that the making of astronomical observations competent to afford an approximate determination of the position of the Observatory would be regarded as a determination of the "true meridian," and authorize the payment by the State to the Observatory at once; that he was unwilling to call upon me to make the

additional sacrifices which a removal to Albany would entail, but that if I would appoint Dr. Peters assistant under me, and retain the direction of affairs while residing in Cambridge, this $2000 could readily be drawn for the purpose of paying his salary for three years, at the expiration of which time Mrs. Dudley's donation of $50,000 would be again whole; that if I were willing to remove to Albany and take immediate control of the Observatory as soon as the dwelling house should be habitable, he would still provide that this fund should be available for Dr. Peters's salary, if I would appoint him, but otherwise, that he should hold me to my recent suggestion of putting two assistants in his place. And in the latter case, should it be necessary to make an actual determination of the longitude, any surplus which might remain after such determination, would be available for the general expenses of the Observatory.

Upon my courteously but firmly declining to appoint Peters, provided any farther aid was to be expected from Prof. Bache, Mr. Olcott finally went so far as to intimate that, rather than have Peters leave the Observatory, he would dispense with Coast Survey aid altogether. He stated that unless I was willing to come in person, he could see no means of satisfying the community, which, he professed to believe, was clamorous for Peters. I assured him that the officers of the Coast Survey were anxious to do all which could be done in the legitimate exercise of their proper functions, and would certainly continue to contribute what they could towards the advancement of the institution, although in no manner bound until the heliometer should be completed, or by any other considerations than patriotism and the welfare of the science on which the Survey is dependent, but said that I did not think the Superintendent would place other aids at the Observatory to act with one who had been guilty of gross disobedience of orders. I finally agreed to station two assistants in Albany instead of one, subject to the decision of the Superintendent, and asking a short delay for consultation with him and the Scientific Council, left immediately for Washington to confer with Prof. Bache in that city, and to present a report to the Council.

On the ensuing day Mr. Olcott addressed a letter to Professor Bache purporting to give the results of our conference, the essential parts of which letter were as follows:

"Dr. Gould left us last evening to visit you. Three arrangements were discussed with Dr. Gould, as he will have informed you. 1st. Dr. Gould to remove to Albany as his residence, and with two assistants appointed by him or yourself, to take the entire charge of the Observatory; mount and use the instruments, and under the Scientific Council to be responsible for the scientific character of the Institution. We should expect to furnish the few hundred dollars necessary for mounting instruments and furnishing the indispensable equipments. But the donation of Mrs. Dudley not to be encroached upon, beyond what has already been done, which may consume its next two years income.

Secondly, Dr. Gould to take charge as above, with Dr. Peters under him, the salary of the latter to be paid by Observatory.

Thirdly, Dr. Gould to render such services here as may be required for mounting the instruments, and then exercise a general supervision from Cambridge, with Dr. Peters (paid by us) and two assistants from your department in the Observatory—until we secure an endowment commensurate with our aims, and that enlarged and commanding position which Dr. Gould may desire before giving it his personal attention, and committing his own reputation for its scientific success, with the understanding that we would welcome him with open arms, whenever he would signify his willingness to come on and take charge.

If the first proposition, which is broad and full, and which I think embraces our mutual obligations to each other, is to be postponed, then the second proposition which was suggested by Dr. Gould we readily assent to. But we frankly confess that we prefer the third if the first is not accepted. . . . .

We have entire confidence in the pre-eminent ability of our Scientific Council, and we only ask to be allowed to do that, which will not only gratify our own feelings, but harmonize a threatened dissatisfaction among ourselves, and perhaps thwart a more insidious, extensive and adverse combination which in its influence either upon you or us would be mutually disastrous. If driven from our association with you, we shall be upon the ocean without a star to guide, or compass to direct, our course, and we have no idea where in such an event we should land. We cannot but regard such an event as a blow to our most cherished individual regards, and not less so, to the science of our country."

The strange contents of this letter first opened my eyes to the true character of Mr. Olcott, and to the objects which he had in view; regarding the motives I say nothing at present. My colleagues of the Scientific Council agreed with me that an unpleasant and dangerous crisis was impending, and the question was seriously discussed whether we could abandon our position as scientific sponsors, consistently with our duty to

science and those pledges to the donors upon which a large portion of the contributions to the Observatory had been made. We ultimately and reluctantly arrived at the conviction that we could not; and I then determined to make the necessary personal sacrifice to save the Observatory, if possible. I returned forthwith to Albany, and Dec. 22, accepted Mr. Olcott's first proposition without reserve, agreed to sunder every tie that bound me to birth-place and home,—parting from a companionship than which I asked no better, from friends to whom my heart was bound as with links of steel, from all the scenes and memories of childhood,—to take charge of the Observatory without salary, and with the prospect that large demands upon my own resources might be requisite for carrying it on; and I promised to remove to Albany as soon as the dwelling house should be ready for occupation. Prof. Bache also wrote to Mr. Olcott, in behalf of the Council, accepting his first proposition, and wrote to me, offering, in behalf of the Coast Survey, to determine the longitude of the Observatory, by connecting it telegraphically with the system of longitude stations, already accurately determined; provided only that the actual outlays, which this would entail, and which he estimated at about $600, should be furnished him. Thus the services of all the salaried assistants and computers, and the use of all the apparatus and instruments, would be gratuitously furnished, and—while the work would be done with the highest precision known to science, and in a manner which would otherwise be impossible for a much larger amount, and the State would obtain results for the two thousand dollars already voted,—the Observatory would not only obtain them gratuitously, but receive all the surplus of the appropriation above the actual outlays of the field operations, as a fund towards defraying the current expenses; at the same time that the Coast Survey would be relieved from the outlays entailed by the field operations, in obtaining data required for the triangulation of the Hudson river.

Mr. Olcott, to whom I immediately made known the offer, expressed himself highly delighted with this arrangement, by

which, as will readily be seen, all parties were to be gainers, except the telegraphic longitude party of the Coast Survey—my own corps—who were to assume these additional labors without recompense.

In making his proposition, and in our acceptance of it, Mr. Olcott never supposed that my whole time was to be given, or that of my assistants; for he well knew the onerous nature of my Coast Survey duties, as well as the fact that although glad to labor gratuitously for the Observatory, it was necessary for me to earn the means of livelihood. So too, with the assistants; such time was to be given to the Observatory as was possible without conflicting with other and imperative duties. On the same day of my return to Albany, December 22, Mr. Toomer, one of my aids, arrived in Albany, in conformity with a telegraphic dispatch which I sent him from Washington, in order to take Dr. Peters's place. After several courteous and amicable interviews with Mr. Olcott, I left, December 24, for Cambridge, promising to come in person as soon as the premises should be ready. Mr. Olcott suggested that to save Dr. Peters's feelings Mr. Toomer should remain for a day or two at a hotel, until Dr. Peters could surrender his apartment at the Observatory without the appearance of coercion. This was quite in conformity with my own views and wishes, and I assented at once. Notwithstanding this, I was soon again appealed to by Mr. Olcott to appoint Dr. Peters. I had pledged myself to remove to Albany and take charge of the Observatory, in addition to my regular duties in the Coast Survey, and without remuneration of any kind, with an endowment only one-third that which had been considered indispensable before the active operations should commence, and with every dollar of the income of this fund mortgaged for at least two years, in consequence of expenses, of which a considerable part had been made in opposition to my known views; and, though the step involved great personal sacrifice, yet, rather than the institution upon which so much was to depend for the future of American science, should be destroyed or perverted to ignoble uses, I had not hesitated to accept Mr. Olcott's proposition; and now I was met by this

very application again, and on the pretended ground that a strong feeling had grown up in the community in favor of Dr. Peters, and that his separation from the Observatory would be so much regretted as to interfere with farther donations. This new application was courteously and respectfully, but firmly declined. Still, it was again repeated, on the ensuing day, and I then agreed to submit the case to the Scientific Council, and to be guided by their decision. This decision was strongly in the negative.

Some weeks had passed and Dr. Peters showed no signs of leaving the Observatory. Mr. Toomer had kindly offered to aid him in bringing up certain arrears of work, an offer which was accepted and generously fulfilled. Still Dr. Peters remained at the Observatory, and Mr. Todtner at a hotel; the former assigning various reasons and apologies from time to time for his delay,—the chief of which was that he expected soon to leave town in order to take part in a Mexican Survey upon which he had obtained an appointment; and that his removal to lodgings in the city would be attended with considerable expense. Mr. Toomer, though himself still compelled to remain at the hotel, accepted these apologies with great readiness, and delicately refrained from doing or saying aught which might jar upon Peters's feelings. Meantime Dr. Peters was, as it is now known, busily employed in traducing him, and published in the newspapers a letter full of offensive and insulting insinuations regarding myself and the Scientific Council.

At last, after more than two weeks had elapsed since the agreement, and five weeks since Dr. Peters had left the Coast Survey service, I deemed it my duty to interfere. On the 6th of January—being informed that he shewed no signs of surrendering the Observatory to Mr. Toomer, and moreover had unpacked his books, and provided a winter's supply of coal,—I decided, after conference with a member of the Council, to visit Albany again, and, in justice to Mr. Toomer, fix some definite day for him to take possession. On arriving Jan. 7, I addressed Dr. Peters a very civil note, inquiring what time it would be convenient for

him to surrender his apartments in the Observatory building, and asking a reply by the bearer. Previous to sending this note, however, I addressed another to Mr. Olcott, informing him of the step which I proposed taking. No reply from Dr. Peters came for some hours; but, finally, a note was received from him, bearing the Observatory imprint, and reading as follows:

"Sir—I have remained since the 1st of December last in the Observatory, at the request of the Trustees, and shall leave when the Trustees request me to do so."

Being aware that no meeting of the Trustees had been held for practical business for some years, and knowing that Dr. Peters had visited Mr. Olcott since the reception of my note, the case became suddenly clear to me. I saw to what an extent the Council and myself had been deceived, and saw, too, that the mask was now to be thrown aside. Without farther action I left on the same day for Washington, to consult with Professors Bache and Henry; and, soon after my arrival there, received a telegraphic dispatch, informing me that the papers announced the election of Dr. Peters, by the Trustees, as "Observer." This flagrant violation of the compact, already made and acted upon, formed the climax of Mr. Olcott's treachery, and left no room for doubt as to the manner of men with whom we unfortunately had to deal.

It afterwards appeared that on the very next day, Jan. 8th, a memorial addressed to the Trustees, asking that Dr. Peters be appointed an "observer," was extensively circulated by Dr. Armsby, and by a gentleman at his request, and many signatures of prominent citizens obtained to it. There is good reason to believe that this memorial was drawn up by Mr. Olcott himself; certainly all the influence which he could exert was applied to obtain signatures for it, and many were obtained by false representations on his part. In illustration of this, I may refer to the letter of Hon. J. V. L. Pruyn, who has publicly recounted his experience, and the manner in which his signature was obtained.

Of the persons whose names are there appended, two are among the signers of the "Statement;" five more have voluntarily informed me that their signatures were obtained by

misrepresentations, and it is certain that a large number of others affixed their names under a total misapprehension of the nature of the document, and a reprehensible concealment of the facts of the case, if, indeed, the document now published be the one which they signed—a point upon which I have no information, but regarding which the character of the "Statement" would naturally lead to suspicion. It is a curious fact that three of the four gentlemen whose names are especially selected by the Accusers, as having then coincided in opinion with Mr. Olcott, had not only discovered that they had been made the victims of deception, but had demanded the withdrawal of their names, within a few days after their signatures had been affixed. Yet they are not only published eight months afterwards by the Accusers, but are specially named in the "Statement," in order to convict these gentlemen of inconsistency!

Upon the receipt of the telegraphic dispatch above mentioned, Prof. Henry immediately left Washington for Albany, and I returned to Cambridge, unwilling again to be brought into contact with men so different from any whom I had ever previously known. On my arrival I found that Professor Peirce had also of his own accord repaired to Albany; astonished at the breach of faith, and believing that some real misapprehension must underlie it all. On the ensuing day, dispatches from Albany summoned Professor Bache and myself to join our colleagues. We found the city flooded with calumnies of every kind, traceable in many instances, and uniformly, when traceable at all, to Drs. Armsby and Peters. The relations of the Coast Survey to the Observatory were grossly misrepresented, and strong efforts made to excite jealousy or suspicion of what was called the grasping and ambitious policy of the superintendent, who desired to subject the Observatory to his own dictation; and to arouse hostility and odium against myself, whose jealousy, it was said, had expelled the accomplished and inoffensive Peters, because he had discovered a comet. Garbled and falsified extracts from my letters analogous to those of the "Statement of the Trus-

tees," had also been circulated by Messrs. Armsby and Wilder. We learned from the President of the Board, General Van Rensselaer, and from other members, that the alleged election of Peters as "an observer" had no foundation in fact, and that the opposition in the Board to such a step had been so strenuous that the question had not even been put to vote. Still we severally received official communications from the Secretary, informing us not only that Peters had been elected, but that the election was unanimous! And we were told by members of the Board, that they were entirely unaware of the arrangements already entered upon between Mr. Olcott in behalf of the Trustees, and the Council,—although under these arrangements action had been taken on both sides prior to this meeting;—and that no information whatever, on the subject of the existing contract, had been given to the Board.

Let it be remembered that the meeting of the Trustees held January 9, was called upon application of Mr. Olcott, who based his action upon the memorial above mentioned, and in great part fraudulently obtained; and that at the meeting, the independent appointment of Dr. Peters was advocated mainly by Messrs. Olcott and Armsby. Probably no member of the Board at this time, except these two, understood the flagrant violation of faith and of solemn compact which this course would involve, nor the insult which it implied to the Scientific Council; yet from a general sense of decorum and propriety it was earnestly opposed, especially by the President, General Van Rensselaer, and by Messrs. E. P. Prentice and Eliphalet Wickes.

Under these circumstances Professors Henry and Peirce addressed a letter to the President, requesting him to convene the Trustees, with a view to personal conference. This he did, and on the 16th of January a meeting was held, at which each of the Council in turn addressed the Board. It is to this meeting that allusion is made by the majority in their Second Attack, (p. 61,) and in the alleged speech of Mr. Wilder.

Regarding my own remarks and action upon that occasion the Accusers give very contradictory accounts. One is (p. 61):

"He finally concluded to justify himself with the Council, and to attempt to retain a good position with a majority of the Trustees, by endeavoring to place in a false position one of the latter," [Dr. Armsby.]

A second is, (p. 63):

"Dr. Gould concluded his remarks by pledging himself to *action*, for the future, and to an earnest endeavor to promote *harmony*, and the prosperity of the Institution; and by begging the members of the Board to 'give him their votes.'"

A third is, (p. 65):

"You all remember the intemperate outburst of Dr. Gould when alluding to Dr. Peters, asserting his incompetence, and dealing largely in personal vituperation, all savoring more of the petulance of an irascible and pedantic school-master, than the calm dignity which should distinguish the savan and the scientist. So marked and noticeable was the eruption, that some of his more politic colleagues, by expostulatory waving of their hands and soothing entreaties, calmed him into something like a respectable equanimity."

A fourth is, (p. 79):

"Occupying a position which he had but just obtained at the hands of the Trustees, and that, too, not without the most humiliating importunity."

and, (p. 83):

"The humiliating struggle which it had cost him to retain his position, was not forgotten."

Now, no one of these statements or innuendoes is true! I carefully avoided all allusion to Dr. Peters, not even mentioning his name. I neither "indulged in denunciation," nor was signaled to, nor entreated by my colleagues, nor did I attempt to justify myself to anybody, nor did I "humiliate" myself to the Trustees, nor did I ask for "their votes," which I neither desired nor received. I gave a narrative to the Board of what I had been doing for more than two years in behalf of the institution, claiming no credit, but allowing the members to draw their own inferences. Then, for the first time, I publicly avowed the difficulties with which I had been struggling, owing to the interference with my plans; doing this, however, as kindly as was possible under the circumstances, and giving but a small part of the whole truth. Finally I stated that I had now found the newspapers teeming with anonymous abuse, and learned that the city was filled with calumnies; and I called upon any member of the Board who knew or had heard of anything discreditable, or improper

on my part, to let me know the accusation, in order that I might refute it. Not a man answered. And, after the meeting, I had the gratification of receiving the praise and congratulations of each of my colleagues, for what they considered my forbearance under provocation, and self-restraint under trying circumstances.

Prof. Bache spoke last, having reached the city during the meeting, and been conducted from the railroad station to the room where we were already in conference,—arriving soon after I had begun to speak.

He recapitulated the nature of the past relations of the Coast Survey with the Dudley Observatory, and the reward which it was now reaping; the labors of the Council in behalf of the Observatory; their sense of the return made for their earnest devotion; he produced and read Mr. Olcott's letter of Dec. 19th, with its ungenerous propositions, and described my instant and complete acceptance of the first one, spoken of by the writer as the one "which I think embraces our mutual obligations to each other." The effect upon the Board was most striking and not easily to be forgotten. Amazement was depicted upon almost every countenance. The confusion of Mr. Olcott was palpable. The letter was passed from hand to hand, and after the Council took their leave the Board adjourned without action.

Three days after, on the 19th of January, 1858, the Board met and ratified the compact. It must not be forgotten that the first preamble, as given in the "Statement," p. 68, reciting a resolution of the Board, of January 9, is here interpolated by the authors of the pamphlet, and that the very suggestive word "SUCH," which they have actually printed in small capitals in their first resolution, "*as* SUCH *Scientific Council*," was here substituted for the word "A," as the resolution was originally passed, or at least as it was communicated by Dr. Armsby to each member of the Council. This substitution, though carefully made by the Accusers, on pages 68 and 151, was accidentally omitted by them on page 123,—where the resolution stands as it was passed.

They also introduced, for motives now evident, two clauses

into the ratification, which, if bearing the meaning since attempted to be put upon them, were a recital of pretended facts, false in themselves, and were designed to mystify and pervert the true meaning of the compact. Annexed is their resolution of ratification, with these sentences italicized:

"*Resolved*, That the Board of Trustees ratify the proposition of Mr. Olcott, on behalf of the Trustees, which has been accepted by Prof. Bache, *of the U. S. Coast Survey*. That the Observatory, under the supervision of the Scientific Council, shall be immediately placed in operation, and in charge of Dr. B. A. Gould, Jr., and his assistants, *in the employ and pay of the United States Coast Survey*."

When it is borne in mind, that the letter of Mr. Olcott made no allusion to the Coast Survey whatever; that Professor Bache, in his remarks before the Board, had stated the nature of the past services rendered by the Survey,—services which had been so ill-requited by the Executive Committee; had alluded to the misrepresentations sown so broadcast; and expressly declared that he had not committed and should not commit the Coast Survey to any official connection with the Observatory, while he was yet happy to afford his personal aid to the best of his ability,—the implication of the clause "in the employ and pay of the U. S. Coast Survey" will be better appreciated.

Mr. Olcott was perfectly aware of the nature of the services which were to be rendered by myself and by my assistants, and every conference and discussion was based upon full mutual understanding of this point. For five years I had been in charge of the telegraphic determinations of longitude by the U. S. Coast Survey—upon this position my subsistence depended, I was willing to give to the Dudley Observatory all the time and strength compatible with the proper discharge of my official duties, and so were several of my aids. More than this was never promised; nor did Mr. Olcott's proposition imply it. None of the time to be given to the Observatory by myself and aids was to be Coast Survey time; but, on the contrary, it was to be only what we could give without interfering with our regular duties in that service.

CHAPTER V.

OBSERVATORY RELATIONS AND HISTORY DURING THE YEAR 1858.

Let us now survey the condition of affairs at the commencement of this new epoch in the history of the Observatory, and review the transactions of December and January.

Previous to the compact of December, Mr. Olcott had insisted that Dr. Peters should be retained at the Observatory after his separation from the Coast Survey, in spite of his unworthy conduct towards Prof. Bache and myself; in spite of his disregard of all the decorum due to official relations; in spite of the demoralization which such a course would tend to produce upon any who might be associated with him; in spite of his detention of the observations for which he had been paid and supplied with instruments by the Coast Survey; and in spite of his dishonorable intrigues.

My position had thus been rendered extremely embarrassing. On the one hand a compliance with this requirement would have been injudicious in the highest degree, and from every point of view would have been offensive and insulting to the Superintendent, who was at once my superior officer and my honored friend. It would have been opposed to the interests of the Observatory, and would necessarily have deprived it of such incidental aid as the Coast Survey might be able to render. I had also discovered that by insidious misrepresentations, while enjoying my entire confidence, Dr. Peters had alienated the sympathies of more than one of my friends. And—although I had no personal quarrel with him, and bore him no ill will, but was, on the contrary, ready to aid and help him to an extent which now surprises myself—I could not but feel that any farther connection would be unlikely to produce agreeable relations with one whom I had ceased to respect, and who must be well aware of my full knowledge of his conduct. On the other hand, any refusal on my part would imply an indisposition to gratify Mr. Olcott, who had been among the most active in his exertions to obtain donations for the Observatory, and in his efforts to promote its establishment.

After long and full reflection I arrived at the conclusion that it would be entirely wrong to assent to the application; but that it might be possible both to make such new arrangements as should show Mr. Olcott that I was influenced by no consideration except the real welfare of the Observatory, and to convince him that it would be unlikely to succeed unless those having the scientific direction were allowed to select assistants who possessed their confidence and regard.

In a conversation with Mr. Olcott, Dec. 18, I set forth these principles as already stated, and received the reply already described.

The extraordinary declarations of Mr. Olcott, relative to the available funds of the institution—declarations which I had subsequent reason to believe were exaggerated—and his very remarkable propositions founded upon them, astonished me so much that I declined giving any reply, but asked a short time for consideration, and for consultation with my colleagues of the Scientific Council, before assuming the responsibility of assenting to either of these schemes.

I hastened to Washington at once, and prepared a report to the Council, which was presented December 21. On the same day arrived the letter of December 19, from Mr. Olcott to Prof. Bache, in which our conversation was so strangely distorted and misrepresented, and which first betrayed to me the true character of its author.

The reader who will turn back to this letter, will observe not only the distortion of our conversation, but also the delicate intimation or threat of a possible rupture, conveyed in the latter part of the letter as quoted; the peculiar significance of which becomes very palpable in the events which promptly followed, in the violent attacks,—through the public press, and by copious pamphlets,—upon the four scientific men, just before so strong in the "entire confidence" of the Managers, but whose characters became so transmuted by their failure to fall in with Mr. Olcott's personal plans and intrigues.

The reception of Mr. Olcott's letter preceded by a few hours the presentation of my report to the Council,—a report which I

have used to some extent in the preparation of this narrative, and which closed with the declaration on my part that I was "ready to accept Mr. Olcott's first proposition, without proviso, requiring only a few weeks' time to make every preparation, and deeming any personal sacrifice slight in comparison with the failure of a noble institution, or the failure to fulfil pledges incurred, no matter under what misunderstanding."

I returned to Albany and personally accepted Mr. Olcott's first proposition, "pure and simple." Prof. Bache also replied, as already stated, to Mr. Olcott's written letter, and informed him officially that the Council, on their part, accepted the arrangement first named by him. Both parties acted at once upon the arrangement, which became in honor, justice and law, a finality. Under it, one of my assistants was forthwith stationed at Albany; and Mr. Olcott was informed, both orally and in writing, that he had only to announce that the establishment was ready, and I should at once remove to Albany, in person, accompanied by still other assistants.

Then began that course of deception, treachery and violated faith, which has characterized the proceedings of the Managers since that time. Messrs. Olcott and Armsby expressed their gratification, promised their co-operation, and began their intrigues.

A movement, already alluded to, was almost immediately set on foot by them, to produce the appearance of, and as far as possible also to create, that very state of feeling in the community which they had represented as existing in behalf of Dr. Peters, and which it was their favorite policy to harp upon. For an illustration of this course, I beg again to refer to the public letter of Mr. John V. L. Pruyn. By false representations, as already mentioned, signatures were obtained to the document, drawn up at the procurement of Mr. Olcott, and which is published upon pages 55 and 56 of the "Statement" of the Accusers.

It is proper to repeat here that although Dr. Peters's resignation took effect December 1, I had invited him to consult his own convenience as to the time of his removal, and even so late as December 23, (although Mr. Toomer had already arrived

to take his place in the Observatory building,) I had instantly acceded to Mr. Olcott's suggestion that he should remain a few days longer in the occupancy "to avoid the appearance of a dismissal." Early in December I had offered him assistance of the most "material" kind; and when, on my return, December 24, to Cambridge, I found a request to nominate some one for a position, quite within Dr. Peters's line, in conformity with his known tastes, and with a salary more than double that of the position in Mexico which he had told me he intended accepting, I immediately wrote him the letter given on page 54 of the "Statement." Of other circumstances connected with this letter, I shall speak in the Second Part. Unlike most of the quotations given in the "Statement," it is essentially as written, excepting the italics. This kindly meant act is distorted by the signers of the pamphlet into an act of meanness, and into a manœuvre to get rid of him. On the second day after writing this letter, I received an Albany newspaper containing a public letter of Dr. Peters filled with bitter and insulting innuendoes, aimed at myself and the Council. This was his first overt act. I did not resent it; nor have I ever resented or noticed in any manner, direct or indirect, any one of the long series of insulting documents which have since emanated from him. My last act towards him, like the first and all intervening ones, was an act of kindness. My sole offence was the refusal to appoint him an assistant, under the circumstances already detailed. Contrary to the assertions of the Accusers throughout their book,—I have not "denounced" him at all, nor is any "denunciation" necessary. A narrative suffices.

The Council, pursuant to their adjournment, reassembled at Philadelphia, on the 6th of February. During their January visit to Albany, they had earnestly devoted themselves to the work of re-establishing harmonious relations. Dr. Armsby had expressed contrition for the part he had played towards me, had been freely forgiven, and had promised his best efforts for *co-operation and support*. The same promises had been made *by Mr. Olcott, with an emphasis* which led us again to believe him sincere. Any act or word, however slight intrinsically,

which could imply distrust, was earnestly to be deprecated; and after long deliberation the Council arrived at the conviction, that no trick was intended by the insertion, in the Resolution ratifying the Compact, of the clause "in the employ and pay of the United States Coast Survey;" that these words might be construed as innocently and harmlessly alluding to the fact that myself and assistants were also in the Coast Survey service; that they were intended for no ulterior purpose, and prompted by no dishonorable motive. It was therefore the opinion of all, and unanimously voted by the Council in due form at their meeting of February 6, that no exception should be taken to the vote of the Trustees on account of this clause; but that in consequence of the title affixed to Professor Bache's name, he should place the fact on record, that the acceptance alluded to was not as "Superintendent of the Coast Survey" but as a member of the Scientific Council. With this correction they unanimously ratified the action of Professor Bache, as the Trustees had done that of Mr. Olcott. It is proper to repeat, that the resolution of January 9, recited in the first preamble, as printed on page 68 of the "Statement," does not occur in the four copies of the resolutions of January 19, as signed by the Secretary, and transmitted by him to the several members of the Council—thus showing the manifest interpolation of this preamble in the pamphlet.

There are many circumstances connected with the events which I have thus endeavored briefly to narrate, and bearing upon this controversy, all demonstrating the same spirit of trickery, intrigue and deceit. But I have given enough, and pass to the consideration of other acts of my Accusers, which it is my painful duty to expose.

On the 7th of February, the day after the meeting of the Council in Philadelphia, I presented myself at Albany, to take charge of the Observatory. The premises were not yet ready, and by Mr. Olcott's advice I returned to Cambridge to superintend the packing and transportation of my books and other effects, returning to Albany, on the 20th of February, since which time this city has been my residence.

From this narrative it will be evident to all, that in order to warrant any interference by the Trustees with the engagement thus made, and carried out by me at so much personal sacrifice, some violation of this engagement on my part or on the part of the Council must be shown. If any thing other than such violation could serve as a sufficient pretext, it must be some gross dereliction from duty, or disregard of the true interests of the Observatory on my part. Whether any such has been manifested the reader must judge.

The majority now endeavor to cover up their assumption and attempt in June last, to expel me from the Scientific Council, and in July to dissolve relations with the remainder of the Council, mainly by a narrative of alleged Incompetency, Untruthfulness and Extravagance, manifested by me prior to the time at which these arrangements were made. From the preceding statement it will appear, that in January last, with a full knowledge of whatever is true in the assertions which the chief actors in this business now bring forward in vindication of their course, the Compact by which the Observatory was placed in my charge was deliberately and solemnly ratified. And it is most evident, that unless some act of mine subsequent to January 19, 1858, could authorize the action by which the Board, endeavored, in June, to drive me from the Dudley Observatory, nothing could warrant this procedure. I am now speaking as well of the moral, as of the legal bearing. That the latter is none the less strong, I am advised by high legal authority; but intend to leave legal questions to my counsel, and to present the matter here in such a light that every man of honor and truthfulness may be competent to judge of it.

As the Council understood the action of the Trustees, January 19, it seemed to have put an end to all sources of discord. Upon arrangements made by Mr. Olcott and his friends, Dr. Peters was appointed to the charge of an Observatory at Hamilton College in Clinton, N. Y. The Council were also informed, January 18, that no acceptance of the observership had been received from Peters, and that the vote of January 9, appointing him an observer required, therefore, no act of dismissal. Whether the assertion of Messrs. Olcott and Armsby

on that occasion, or the account on page 57 of their recent attack, in which they print a letter of acceptance, dated January 9, was the true one, the reader is as competent to judge as I am.

No occasion for the absence of harmonious action now seemed to remain, other than the memories of the past, but as I had in no instance been an aggressor, not even in self-defence,—for my remarks before the Board had been courteous, though decided, and had been followed on the next day by an expression on Dr. Armsby's part of a desire to resume kindly relations,—there appeared no reason to apprehend any discord. It is true I now knew something of the two men with whom I was chiefly to occupy official relations; but this very circumstance made me the more confident of my ability to avoid any new occasion of discord. By a policy of unvarying courtesy to Mr. Olcott and Dr. Armsby, I fully expected to secure the return of more congenial feeling. It was not for me to sit in judgement upon their moral character; neither approbation of it, nor the reverse, were called for, on my part; but it was my duty to rescue the Observatory from its threatened downfall. The other members of the majority I assumed to be worthy men; and even when, at a later day, my eyes became opened in respect to one of them, now no more, no change occurred in my regards for the remainder.

The new era had been inaugurated, to be sure, by a renewed application from Mr. Olcott, January 19 and 20, that I would appoint Peters my assistant, "as an act of generosity;" but I supposed that the day's reflection, which I then gave the subject, and my subsequent earnest appeals to Mr. Olcott not to urge this step upon me had given him no offence, in spite of my non-compliance with his applications. Certainly his smiling blandishments and declarations had left me under this impression. Mr. Olcott's request, that Dr. Peters be allowed to remain yet a few days more in the building, met, like previous requests of the same kind, a ready compliance; and Mr. Olcott again volunteered the promise of entire support and co-operation. The course of conciliatory compliance with all his other

wishes, of deference to his official dignity as Vice President, and subsequently President, of the Board, and of complimentary attentions, would I supposed efface in time all memories of a disagreeable nature. How totally I under-estimated the vindictiveness and rancor of this man, I was soon made to see and feel, and to appreciate the consequences of a "Want of Harmony."

When, on February 9, I came to Albany with a view to assume personal charge, the dwelling house was not yet habitable; Peters was still in the Observatory, and Mr. Olcott advised a delay of ten days. During the interval of nearly a month since the meeting of January, not a day had passed without some libelous and venomous attack in one, and usually several, of the daily papers. Articles were systematically written to New York journals, in order to be reprinted in Albany, with comments by the authors of the articles themselves. And the paper, then and since most abusive, was at the time, as I have been informed and believe, under some ownership, and to a large extent under the control, of one of the majority. I may say, indeed, that no journal claiming to be respectable could pour out upon any human being such a torrent of scurrility and invective as this paper has poured out upon myself and the other members of the Council for the last twelve months. On some occasions this ferocious invective has formed nearly the entire stock of its reading matter. It is needless to say that it has met with neither notice nor reply from me.

Some of my friends having traced sundry of these communications to Dr. Armsby, I had conveyed a delicate allusion to the fact in a letter written to Mr. Olcott, January 30, upon another subject. He replied, declining to interfere, and assuring me that I was mistaken. I then gave him some information upon the subject in a note, from which he has published a garbled and mutilated extract on page 69 of his Second Attack. To this he made no reply, and I let the subject drop. This information, thus furnished, he now attempts to make the basis of an accusation *against me*!

Mr. Olcott received me politely on my arrival, February 9; said that Dr. Peters would soon vacate his apartments; and

that as the dwelling house was not yet habitable, he thought it might be well for me to delay my coming until about the 20th, by which time Mr. Smith, the builder, had promised that the house should be fit for habitation. Mr. Toomer had been compelled meanwhile to remain at the hotel since Dec. 22, a period of seven weeks;—but I made no new complaint, and when Mr. Olcott wrote to me at Cambridge a few days later, asking me to fix a date for Dr. Peters to leave, I declined: and begged to be allowed to refrain from any farther interference. Dr. Peters did leave February 13.

On the 20th of February I removed to Albany, accompanied or followed by three other assistants, who had generously offered their services to aid in the difficult and troublesome enterprise before us. We found the dwelling house almost untenantable; my letter of January 21, to the Trustees, (published in the "*Correspondence*") asking their approval for the proposed mode of employing the $2,000 coming from the State, had not been answered; nor had any answer been given to my inquiries concerning the dome. And to my astonishment Mr. Olcott now informed me that this appropriation could not be obtained for the Observatory without much trouble, and requested my personal exertions. These were of course given, though at great cost of time and trouble; and finally the $2,000 was appropriated by the Regents, with a perfect understanding of the whole matter.

Then came a new breach of faith by the Managers. The Coast Survey had bound itself to do for the Observatory at an estimated outlay of $600, a work which could not be properly done in any other way, except at a far greater expense. The Observatory had offered to the Regents to perform the same work for $2,000. It was to be done under my own direction, in my capacity of assistant in the Coast Survey, as an extra work. Thus the Coast Survey, the State and the Observatory, were all to be the gainers; and the work was to be done by me and my assistants without a dollar of additional personal compensation. I was also made to labor to obtain the appropriation from the Regents, and yet the Trustees left me to bear the greater part of the pecuniary burden of equipping and carry-

ing on the establishment; in direct violation of the compact, and in neglect and delay of their promises in regard to the State appropriation. So flagrant a breach of faith to all concerned, needs no word of comment.

On the 2d of March, a meeting of the Trustees was held, of which however I had no previous notice or knowledge. A new Executive Committee, consisting of nine out of the fifteen members of the Board, was appointed at this meeting, and clothed with full power, being so constituted as to leave undisputed control in the hands of Mr. Olcott. General Van Rensselaer's resignation of the Presidency and of his Trusteeship was presented, and the Board accepted the former, electing Mr. Olcott to the vacancy thus created. The resignation as a member of the Board, they declined accepting; although June 4, three months later, it was taken from the files and accepted, in order to create a vacancy for Judge Harris.

My letters to the Trustees, of January 21, concerning the distribution of the State appropriation, and January 27, regarding the Dome, having been referred to this new Executive Committee, and notice of the reference sent me by the Secretary, I prepared a new communication to the committee, giving information on various points upon which Mr. Olcott had requested me to make an official communication, and asking information on others. And I requested Mr. Olcott to convene this Executive Committee, in order that I might be enabled to meet them, present my views and confer with them in person. My motives for this were threefold: I wished to place my position upon record; to communicate freely with the committee, thus presenting my views without the formality of written correspondence; and to avoid the intervention of the Secretary, Dr. Armsby, whom I had already found reason to suspect of tampering with the records and other analogous practices, in a manner to prevent, if possible, the formation of any pleasant relations between myself and the Board. My request was complied with, and a meeting of the Executive Committee held March 5. It was the only meeting of the Executive Committee or of the Trustees which I was ever permitted to attend, except-

ing that one which the Council attended and addressed January 16. At this meeting I read the communication of March 4, (printed in the pamphlet of "Correspondence.") With the exception of some remarks and questions of Dr. Armsby, intended to be irritating, but the offensiveness of which I did not choose to notice, the conference was entirely agreeable, and I did my best, (in the language of the communication then presented,) "to learn from the Trustees or their representatives, their views of the course most proper for me to adopt; being alike anxious to conform entirely to their wishes; to assume no improper authority, and to evade no responsibility.

My communication was referred to a sub-committee of five, three of whom were Messrs. Olcott, Armsby and Wilder. Mr. Olcott's name was, however, subsequently omitted from the committee in the copy of the vote sent me by the Secretary, and in the record; and I am able to bear personal witness that more than one of the votes then passed were also essentially changed by the Secretary, and always in such a manner as to occasion me personal inconvenience and embarrassment. Of course no answer to my communication was ever given. After once or twice asking for it, I became aware that no answer was intended.

I will not dwell upon the studied annoyances of these three months. The Council have alluded to the matter slightly in the Defence, and I have no disposition to recount the personal indignities which these two men, with the aid of a third, who is now beyond the reach of human censure, endeavored to inflict upon me. Other letters received in like manner no reply; votes, which it was important for me to be informed of, were withheld by the Secretary, and only obtained by repeated application on my part. My proposal to attend the meetings of the Trustees, and of the Executive Committee, was declined by Mr. Olcott; all facilities for furnishing the Observatory buildings and office were withheld; as was also authority to provide stationery, fuel and lights. The whole basement story of the Observatory building was withheld until May 1st, and given to a former servant of Dr. Armsby, as a dwelling, having been fitted up by Dr. Armsby for this purpose.

The catalogue of small petty indignities and annoyances would be as incredible as it is long; and I pass it by, merely saying that the consistent course of all who exercised authority in the Board was such as to compel the inference that the object was to irritate and annoy me into abandoning the Observatory in despair and disheartenment. This, however, I determined not to do,—being unwilling voluntarily to leave my post until convinced that such a surrender of the sacred trust would be productive of no detriment to the progress of science in our country.

The systematic course of public attack, which was kept up through the newspapers, was traced as before, in all instances where any trace was found, to an individual member of the Executive Committee,—the journal already alluded to being still remarkable for the number and violence of these attacks.

The only "outlays applied for" by me are detailed by the Council in §11 of the Defence. The "applications" for appropriations, consisted simply of estimates, presented at the request of Mr. Olcott, or certificates of the correctness of bills for work, ordered by his direction long previous. I believe in every case of the latter class it became ultimately necessary for me to advance the money individually, in justice to the creditors.

Meantime the discomforts and privations of our residence at the Observatory were great; my estimates and suggestions were neglected; or, when acted upon, were made the means of giving some turn of an annoying sort to the action, apart from the delay. The details were referred to sub-committees of which Messrs. Armsby and Wilder were always prominent members; individual Trustees united in a letter unwarrantably meddlesome, in its nature, if not insulting in its terms. The sub-committee, whom the Executive Committee had invested with power, would not, as such, visit the Observatory, even on the most pressing occasions; and never did visit it but once, notwithstanding my urgent appeals. Yet untimely and dictatorial visitations were made by individual Trustees, and interference attempted with my assistants, who were not in

any way in the Trustees' employ. These assistants, intelligent and exemplary young men, at work gratuitously for the Observatory, were treated in a way that no menial is treated in this country, without being justified in resenting the injury.

Those to whom I should have looked for support were constantly engaged in these attempts to annoy, injure and insult me and my assistants. It was not enough that we received no salary from the Observatory, not enough that I freely expended my own means in its support; but we must be badgered at every step of our progress, finding the most irritating and intolerable acts of rudeness, instead of the generous confidence and courteous consideration to which we were entitled.

Throughout this series of offensive, petty and truly contemptible acts, I think I may claim to have pursued a dignified and proper course, and to have preserved my title to self-respect. Without a high purpose constantly in view, to guide and direct this course, it would have been impossible to pursue it steadily and evenly in the midst of these depressing and saddening circumstances; but I had resolved that, so far as I could help, the Observatory should not fall a victim to the bad passions of unprincipled men, though this might be the case with myself; and I therefore strove with all my powers to conciliate and soothe these men—who, apart from their relations to the Observatory, would of course have been unworthy of a thought.

The visit of three of my enemies in the Board, Messrs. Armsby, Wilder and Pruyn, furnished at last the desired opportunity for fomenting a quarrel. The particulars of their visit may be found on page 102.

It furnished the occasion for a series of insulting resolutions, to which I replied in the letter of May 31, already spoken of, and which is printed both in the "Correspondence," and with the third edition of the "Defence." The only reply with which I was favored is contained in the "want of Harmony" Resolutions, of June 4, and these were only sent to me some ten or twelve days later. It appears that the Executive Committee of Nine met promptly, and adopted a report which they presented to the meeting of the Trustees, called on the 4th of June, and of which I have already spoken. Judge Harris,

soon after his election on that day, appeared and moved my expulsion, but his course met with strenuous opposition. A resolution was, after various attempts at modification, finally agreed on. As transmitted to the Council, and printed by the majority, it reads as follows:

Resolved, That the constantly recurring difficulties which this Board has experienced in the affairs of the Dudley Observatory, arising from want of Harmony between Dr. Gould and the members of this Board, have satisfied the Board that some new arrangement is absolutely necessary, and that the President be requested to communicate these facts to the Scientific Council.

A member of the Board has informed me that the resolution, as actually passed, was different from this, and that my name did not occur in it; but this point has now become a very unimportant one.

There is but little more to add in this connection. The Council, to whom the Resolution was sent, immediately addressed both me and the Trustees, asking information relative to this "want of Harmony," and in reply I submitted my correspondence with the Board and its officers. This correspondence I also published, without a word of comment, on the 28th of June. On the 15th of that month, eleven days after it was passed, the Secretary, Dr. Armsby, transmitted to me a copy of the vote of the Board, and since that time I have had no intercourse with the Trustees as a body. On the 26th of June Mr. Olcott again convened them, presented his Manifesto, obtained their indorsement, and had a summary of it immediately published in a New York newspaper. At the same meeting, the Trustees, 9 to 4, with no more form of consultation with the Council on this pre-eminently important subject than they had shown in January, in the action relative to the alleged election of "an observer," voted that they would no longer recognize me as a member of the Scientific Council.

My colleagues of the Council arrived in Albany, pursuant to their notice to the Board, on the 29th of June, the day previous to the publication of the Manifesto in this city. They investigated the charges, declared them false, and were themselves expelled, so far as a resolution of the Board could expel them.

Mrs. Dudley addressed a letter to the Council, assuring us of her approval and sympathy, and entreating us to stand firm. She addressed the Trustees, calling upon those who could not co-operate with the Council to resign,—an appeal with which they declined complying. Their answer is published on pages 93, 94 of their "Statement," and with the unmanly and false intimation that the letter was prepared "by a prominent party to this controversy," (apparently alluding to myself,) "who dared to invade the seclusion of this aged lady, and obtain her signature to this paper, uncomprehended and incomprehensible as it was by her."

This indecent and ungrateful allusion to Mrs. Dudley has been treated by her with the scorn which it deserves; but to their answer she returned a reply which they have very wisely refrained from laying before their readers.

The Council's Defence of myself, and assertion of their rights under the compact of December,—a compact which the law as well as the conscience of every honest man cannot fail to recognize, and under which I have incurred those pecuniary expenditures of which the law takes especial cognizance,—brought upon them the vote of the Board declaring "the relations which have heretofore existed between the Trustees and the Scientific Council, to be dissolved and terminated;" and still another resolution as follows:

Resolved, further, That this Board will feel constrained to regard the further occupation of the Observatory premises by the gentlemen composing the Scientific Council, or any other person by their authority, as a violation of the legal rights of this Board, so clear and manifest, that it cannot pass unnoticed; and that the President of the Board be authorised, in his discretion, to take all necessary measures to secure the possession and control of the property of the Institution.

It is easy for Mr. Olcott to procure a vote of his majority declaring anything which he may choose they shall declare; but their declarations about legal rights do not make those rights. The foregoing resolution was passed on the 3d of July, and I am writing these lines at the Dudley Observatory in the month of December, 1858, as yet in undisturbed possession of the premises. And although the newspapers have asserted that "the Trustees" had commenced legal proceedings, no legal process whatever has been instituted other than a

"notice to quit," signed with great formality by Mr. Olcott and Dr. Armsby, and served, July 8, upon the members of the Council by a bank messenger.*

How could any of the long catalogue of sins, now imputed to me, justify or excuse the course of the Board in June and July, when these alleged offences preceded the solemn act of January 19, ratifying the compact by which the Observatory was placed in my charge, and were as well known then, as it is pretended they were six months later? To warrant any retracement of this step some subsequent offence must be shown. Here the whole case might be rested, and the generous impulses of all honorable men invoked in opposition to the attempts to drive me from the Observatory—attempts prompted solely by personal malevolence. Nothing occurring since January 19, any more than before, can be found, to serve as a decent pretext,—zealously as a pretext was sought, and constant as were the efforts to goad me into some expression of indignation or contempt which might serve as the ostensible occasion for a quarrel. After three years of self-sacrifice and ceaseless devotion to the work of founding and establishing a scientific institution of the first class, I was determined, if possible to prevent it, that it should not fall a victim to narrow personal jealousies or to the machinations of spite. I assert that no ground of offence, or of censure, can be found in my relations with the Board; but that, even when tormented and goaded by the ceaseless irritation of persons like Messrs. Armsby and Robert H. Pruyn,—persons to whom their membership of the Board gave the power of annoyance, and with whom this official relation compelled me to endure personal intercourse—not one unguarded word or deed gave the opportunity for a just complaint even of "want of Harmony," so far as this depended upon me. Coming to Albany to assume new and heavy responsibilities and cares, unrecompensed save by my own conscience; with previous duties and labors undiminished; surrounded by a set of persons to whom a share in the legal guardianship of the institution had been intrusted, and who seemed to care for

* On the 3d of January, the Observatory was taken possession of by a lawless mob, hired by Mr. Olcott.

the power thus conferred only so far as it afforded the means of inflicting indignities and annoyances upon me; with the burden of its daily pecuniary support cast upon my own shoulders, and subject to ceaseless calumnies and attacks both covert and through the press; my every act assailed; my every omission to act denounced;—I assert that I preserved throughout a quiet and patient endurance; repressing every external symptom of that indignation which no human being could fail to feel.

It will of course be asked, why I permitted myself to occupy so false a position; why I submitted to such insolence, and why I insisted upon retaining a position, where, despite official declarations, it was but too evident, that some of those to whom the charter had given power, were determined to use it for the most pitiful and spiteful purposes. My answer is simple. In the success or failure of the Dudley Observatory, I believed that the success or failure of future institutions of science in America was largely involved. And although there is no want of Americans competent to conduct and guide such an institution,—I felt that under the circumstances, my own abandonment of it would be the signal for its failure and disgrace. If, through the surrender of all that man holds dear,—of health, of life, of everything except good name,—it might be my privilege to make the Dudley Observatory what its founders intended and its Trustees promised, I felt that I should not have lived in vain. These views and the consideration of my obligations and those of the Scientific Council to the Donors influenced my course and fixed my determination.

It was not until after the lapse of more than three months from the time I took possession in February, that a favorable opportunity was found by Messrs. Armsby, Wilder and Pruyn for carrying out their plans. It early became manifest to me, that my absence from the Observatory would be made an occasion for some offensive action, and I carefully refrained, as far as possible, from leaving the premises during the hours of daylight, venturing upon any absence only at long intervals and for very short periods. But by constant watchfulness, these gentlemen succeeded in learning the only two

occasions in the lapse of three weeks, upon which I was to be away during the day. Both these occasions were seized upon by them to visit the Observatory; and by conduct grossly discourteous to my assistants, it was sought to lay the foundations of a quarrel. The account of these visits given by Messrs. Wilder and Pruyn in the "Statement of the Trustees," I believe to be a perversion of the facts in every essential particular. It is only vouched for by their assertions—while it is not merely highly improbable in itself, but is in direct conflict with the accordant statements of three of my assistants, who, from long acquaintance, I know would scorn a falsehood. My full conviction is, that my assistants conducted themselves with dignity and discretion. I approve and indorse their behavior. But be it borne in mind that no complaint against them was made to me. The series of insulting resolutions before referred to, was immediately passed by the Executive Committee, to which I returned a courteous reply, and asked for information relative to any supposed misbehavior of the assistants. This reply was followed by the meeting of June 4, at which Judge Ira Harris was elected a Trustee, appeared, and moved my expulsion; and at which the Board adopted the vote declaring a "Want of Harmony."

Without farther action on my part, and with the view of forestalling any action or investigation by the Council, this was followed by the meeting of the 26th of June, at which Mr. Olcott presented, and a majority of the Board indorsed, the paper now generally known as Mr. Olcott's Manifesto,—a document in which my truthfulness, discretion, competency and honesty were assailed in a chaotic medley of charges, serious and trivial, whose only point of resemblance consisted in their bitterness. These charges my colleagues of the Scientific Council investigated and refuted one by one,—publishing the refutations in a pamphlet entitled "Defence of Dr. Gould by the Scientific Council of the Dudley Observatory." To this the majority of the Board has responded; not with any attempt at disproval, except by means of false assertions and false testimony, but in the new and adroitly constructed Second series of charges,

which has called forth this reply. Without using the only epithets or adjectives which would characterize it, I repeat the declaration that the great majority of its quotations are falsified, and that its accusations and arguments are chiefly founded upon the falsified quotations, and upon the deliberate misstatement of facts. The disadvantage of my position is sufficiently palpable from the necessity of such language to describe it; language which, if used needlessly, would assuredly recoil to my own discomfiture.

The only pretexts put forward by the Accusers, which can be pretended to afford any color of justification for their action are;—First, alleged incompetency, indiscretion, delay and bad faith, shown prior to the date when they placed the Observatory in my keeping;—Secondly, some vaguely imputed delays, and demands for means to equip and carry on the Observatory after that time; and,—Thirdly, my letter of reply to the resolutions of the Executive Committee, passed May 22, the day after the expedition of Messrs. Armsby and Pruyn to the Observatory. In writing this letter, my motive was to represent the fatal effects to the Observatory of the course upon which the Executive Committee had entered; and to do this so clearly that the excuse of ignorance might be unavailing. To have expressed myself less strongly would have been cowardly; for though knowing the desire of certain Trustees to find pretexts for a rupture, and though fully determined to afford none, yet the shameful treatment of my faithful, disinterested, conscientious assistants, whose position precluded them from resenting it and defending themselves, was too great to pass unnoticed by me. Of this letter,—which affords the main excuse offered for their attempt to oust me from the Observatory,—Professors Henry, Bache and Peirce say in the "*Defence*:" "It is a model of a plain, direct, manly, independent statement." They call it a "highly dignified and respectful array of argument," and "declare that this letter which Mr. Olcott condemns, meets our [their] hearty approbation and full concurrence." They moreover say: "This letter is a sample of many straight-forward appeals to the Executive Committee of the Board; and none but men whose

tempers were so inflamed as to excite them to tyrannical acts, could fail to see this."

The judgement of the Nine Trustees is apparently different. In the Manifesto of Mr. Olcott, which they by their votes "approved as expressive of the views of the Board," he says:

"*This letter affords sufficient justification for terminating his relations with this institution*, unless arrogance, insolence and conceit are suited to the taste of the gentlemen of this Board."

In their "Statement" they say: (p. 79)

"That letter has been designated by one member of this Board as arrogant, insolent, and unbecoming the position held by Dr. Gould, and his relation to the Trustees. This opinion has been adopted as the judgement of this Board, and that judgement is now reiterated. Occupying a a position which he had but just obtained at the hands of the Trustees, and that, too, not without the most humiliating importunity, he now *puts on airs*, and assumes to teach the Executive Committee and the Trustees what belongs to them, and in what manner they should discharge their duty."

In a case of such extremely conflicting judgement, it would seem to be the simplest course to refer to the letter itself, which is contained in the published "Correspondence," and in the 3d edition of the "Defence." Let it be remembered that it is the ground mainly relied on for my attempted expulsion, so far as founded on any act since the Observatory was placed under my charge by the compact.

The Scientific Council in declaring their rights, had but repeated the positions taken in the letters of Mr. Olcott and Dr. Armsby, and in their declarations to the donors, or carried out these declarations to their legitimate consequences.

Ignoring their first appointment, and the long sanction of it for nearly three years, by the Executive Committee, the Board met on the third day of July; and—referring to their own wrong-doing of January as being the sole ground and origin of our rights,—referring to their own corporate powers, and claiming to direct all the concerns of the Observatory, although they had surrendered to us the scientific control,—referring to their *quasi* dismissal of myself, though they never had the manliness to bring this to a decisive vote, in which the names of the minority would have been recorded,—accusing me of an appeal

to the Scientific Council, when they well knew that the appeal had come from them,—accusing the Scientific Council of assuming powers with which they were never clothed, when the Accusers well knew that by the original constitution of the Council, by the action of the Executive Committee, and by the resolution of the Trustees in January, the scientific control of the Observatory had been vested in them,—accusing them of sitting as a tribunal on the action of the Board, when they well knew that it was my own case which was on trial before the Council,—forgetting the amenities of language, and their own professions of high respect for the members of the Council, while they rudely and falsely accuse them of "surprising assurance," and of assuming to condemn and reverse the action of the Board,—alleging again, perversely, that all this is done without the shadow of right, when they well knew that the actions of the Council were in consonance with its original appointment and legitimate duties,—perverting the generous course of the Council in determining to take temporary charge of the Observatory in person, in order to relieve the Majority from the difficulties in which they were placed,—they proceeded, violently and in temper, to declare the relations which had heretofore existed between the Trustees and the Scientific Council to be dissolved and terminated.

It is well that my Accusers have put their extraordinary resolutions upon record, and that the fallacies of the preamble and the violence of the resolutions will now speak for their authors forever.

What a return for the valuable services of Professors Henry, Bache, Peirce, and Gould, stated by the preamble to have been rendered for nearly three years!

If the Board did not concur with the Council in their view of their rights and of their position, should not the "valuable services," and the respect for the "high positions," at least have called for moderate measures? The angry tempers of the majority of the Board, in secret conclave, uncontrolled by those influences which publicity gives, and confident of the power of a majority, drove them headlong forward; and all who dared

to resist the power and dictation of their President must be crushed.

With total disregard of the interests concerned, the Observatory was at once to be vacated by the Director and Council; the observations to be discontinued; the costly instruments to be left unprotected; no convenience, public or private, was to be regarded; the amenities and the decencies of life and society were to be set at naught; and the President of the Board was a Committee of One to force these offenders from the Dudley Observatory and Van Rensselaer Hill! It was a remarkable stroke of policy, by which the majority of the Board put the responsibility of farther offensive measures upon the President. He had already shown so reckless a determination to oppress all who opposed him, that the majority might well shrink from the subsequent steps in consummation of the wrong done by their votes and in their names.

The Scientific Council, in the face of a solemn compact, were to be driven from the scene of their labors; I was to be separated from the instruments which had been made under my superintendence, and mounted by my labor,—this procedure forming the culmination of a series of the most violent, arbitrary and unjust acts which a close corporation has ever perpetrated in our country and our day.

The Coast Survey station, with the instruments of the United States mounted and in use, was to be abandoned by the Superintendent and his assistants, that the President of the Trustees might take "possession and control." The series of observations, conducted at such considerable expense to the State of New York, and to the United States, was to remain incomplete; and the officers were to be ejected from the premises, and cut off from the execution of their duty.

On Tuesday, July 13, a call for a public meeting, to give expression to the feeling of the citizens of Albany with reference to the action of the Trustees, appeared in the daily papers. The call was signed by many of the most prominent citizens, and the meeting was numerously attended. General Van Rensselaer presided; and the Council were cheered and encouraged

by a most cordial reception, and by the warmest expressions of sympathy and support. The occasion was one upon which they, as well as myself, will always look back with peculiar pleasure. It assured them that their course—a course dictated only by the highest sense of duty to science and to truth—met with the earnest approbation of those whose good opinion they could not but value. It showed that power, blinded by passion, had not prevailed in lowering them in the esteem of the citizens of Albany. Professors Bache and Henry addressed the meeting, and explained the nature of our past and present connection with the Observatory. The Hon. D. D. Barnard followed in a speech of manly vigor and earnestness. A Committee was appointed to draft resolutions; and the resolutions presented by them, which we here insert, were loudly applauded and unanimously adopted:

"*Resolved*, That we feel compelled from a sense of public duty to declare in this public manner, that we utterly disapprove and condemn the proceedings and action of the majority of the Trustees of the Dudley Observatory in relation both to the Director, Dr. Gould, and to the Scientific Council.

"*Resolved*, That, after the investigations that have been made,—the result of which have been laid before the public,—there does not, in our judgement, exist, and never did exist, any substantial or probable grounds whatever for any of the bold charges, accusations, or complaints, contained in the published statement of the President of the Board of Trustees, against Dr. Gould, the Director of the Observatory, or for the injurious reflections cast upon the very meritorious young gentlemen, his assistants at the Observatory.

"*Resolved*, That the action of the Board of Trustees in this matter does not, in our judgement, exhibit a true regard for the interests of the Dudley Observatory, or the interests of science; but appears to us to have been taken in manifest disregard of these interests, and, if persisted in, must end in the certain ruin of the Observatory.

"*Resolved*, That, after the gross indignity offered by a majority of the Trustees to Dr. Gould, the Director, and to Professors Henry, Bache, and Peirce, of the Scientific Council, and so long as the insult remains unredressed, no astronomer and no man of science can consent to take their places at the Dudley Observatory without a betrayal of the common cause of brotherhood in science or without personal dishonor.

"*Resolved*, That the circumstances under which Dr. Gould, the Director, and the Scientific Council, were placed in the immediate charge and actual possession of the Observatory building and instruments; of the principal dwelling-house on the ground, furnished at the expense of Dr. Gould; and of another building, erected under the orders of Prof. Bache, the Superintendent of the Coast Survey, as a station for that work, with the sanction of the Trustees, and which is filled with the instruments

belonging to and in the service of the United States,—render it the duty of these gentlemen not to yield possession of the premises to the injury of the important interests committed to them, until their legal rights therein shall be ascertained and determined by due process of law.

"*Resolved*, That this meeting, having learned that the donors, or a large number of them, have called upon the Trustees to submit the whole matter of the difficulty, in regard to the Dudley Observatory, to certain gentlemen of the highest character and standing, named by them, to pass upon and determine the difficulty, express the earnest hope, that the Board of Trustees will comply with that proposition, as the only means, short of a resignation of several members of the Board, of saving the Observatory, and restoring it to a condition of usefulness.

"*Resolved*, That a committee of fifteen, including the chairman, be appointed by him to prepare a communication in behalf of this meeting, to be addressed to the citizens of Albany and to the donors and friends of the Observatory, and to be signed by the committee setting forth and enforcing the views of this meeting as expressed in the foregoing resolutions."

In accordance with the last resolution, a Committee was appointed, whose report, in the form of an address to the donors and friends of the Observatory, signed by Messrs. Stephen Van Rensselaer, D. D. Barnard, Erastus Corning, H. Pumpelly, J. V. L. Pruyn, M. F. Cogswell, John Tayler Cooper, Thomas Hun, James Edwards, Orlando Meads, J. B. Plumb, and Isaac Vanderpoel, is before the public.

The encouragement and comfort afforded me by this indorsement and approval of my course, and coming from such men, has been beyond description. I will not dwell upon the contents of the Address, farther than to quote its closing paragraph,—which was as follows:

"It is possible that the Dudley Observatory may be saved, if the Board of Trustees would close with the proposition understood to be made or about to be made, to them by the donors, to submit the whole subject of its difficulties to the arbitrament of several very eminent and unexceptionable gentlemen, as named in that proposition, otherwise, we know of nothing now that can restore it to public favor, and to any possible usefulness, but the prompt and voluntary withdrawal of such of the Trustees as shall be found unwilling, after the developments and exposures which have been made, to co-operate with Prof. Henry, Prof. Bache, Prof. Peirce, and Dr. Gould, in a manner to enable them to prosecute and perform their proper duties to the Observatory, the donors, and the cause of science. This, or a thorough revision and alteration of its very exceptionable charter by the legislature, seems to us to afford the only remaining grounds of hope for the Observatory."

CHAPTER VI.

PRINCIPAL ACCUSATIONS OF MR. OLCOTT AND HIS PARTIZANS.

1. *General Considerations.*

It seems important for me to give some account of my attempts to bring the Observatory into activity with few other means than those afforded by my own private resources. It would have been unreasonable enough to call upon any well-salaried head of a well-furnished Observatory, to render an account of his stewardship during the first few months after his assumption of his charge; yet, under very different circumstances, the course of my accusers demands this of me. Some little account of the progress of affairs at the Observatory will therefore be necessary; and it may be well to speak of the advance in each of several particulars, while rebutting the slanders and untruthful allegations of my assailants upon the same head. And preliminary to this, I beg leave to say a few words as to the objects of an Astronomical Observatory.

The science of Astronomy consists in the investigation of those laws which govern the motions of the heavenly bodies. The Natural History of the heavens, although a cognate and most interesting field of inquiry, is not included in the domain of Astronomy proper. This latter treats of laws, and of motions; and, as has been well said by one of the first of modern authorities, "all else that we can learn of the heavenly bodies, as, for example, their appearance and the character of their surfaces, although, indeed, far from unworthy of attention, is not of *astronomical* interest. Whether the mountains in the moon are of this or of that form is, for the astronomer, of no more interest than is the form of terrestrial mountain ranges for those who are not astronomers. Whether Jupiter exhibits dark belts upon his surface, or is equally illuminated, is just as little a subject for the investigation of the astronomer, and even the four moons, by which the planet is accompanied, interest him only by their motions. To learn the motions of the celestial bodies so thoroughly as to render full account of them for any epoch, is and has been the problem which Astro-

nomy must solve." * In the ever-increasing dependence of every department of human knowledge upon every other department, Astronomy often becomes dependent upon these other branches of research. Thus the investigation of the forms of such mountains as are thrown into bold outline upon the moon's circumference becomes important in examining their effect upon occultations; the belts of Jupiter become important in determining the direction and amount of his rotation, as well as in the photometric studies of the astronomer; the masses of his moons become a subject of importance, not only in their reciprocal influences upon one another's motions, but also when, as in one recorded case, a comet passes between them; but the study of the *motions* of the heavenly bodies is nevertheless the sole problem of Astronomy. Its first duty is to establish the positions of the fixed stars, which form the beacons and guide-marks of the heavens; its next is, to determine, from the apparent motions of the more prominent wandering celestial bodies, the movements of our own planet; and its third is, by means of the data thus obtained, to investigate the laws and motions both of our own systems, and of the innumerable other universes which gem the firmament.

No principle is better established than this, which applies alike to all departments of science, physical and moral, namely: that the abstruseness and want of popular interest of investigations increase in proportion with their scientific and technical value. So it is in Astronomy, and the highest functions of a well equipped and properly directed public observatory are precisely those which would be likely to meet with the least popular appreciation.

With these explanatory remarks, the motives will easily be comprehended which prompted me, in 1855, to join in the recommendation of a Heliometer as the instrument of first importance, and to advocate the acquisition of a Meridian Circle as the next. The large Equatorial telescopes—of which so many already exist in the country, and which offer the pre-eminent advantages of the highest magnifying capacity, of

* Bessel *Popul. Vorles*, p. 5.

making visible the faintest objects, of pointing to any regions of the heavens,—seemed not so important for the beginning. And I advocated the acquisition of that instrument which permits the most delicate and precise measurements of position, and gives results which—though possessing the least popular interest, and costing the greatest labors, both in the attainment of the crude observations, and in the computations which are to adapt them for astronomical use—are, in my judgement, of the highest importance for the progress of astronomy.

The functions of a public observatory, furnished with instruments, provided at great expense with the delicate appliances by which alone that exactness can be attained which the present state of astronomy demands, and equipped with a view to the organized means of many observers and computers, laboring for one common end, are far different from those of a private observer, whose object is to advance and benefit science in such manner as can best be accomplished by his unaided personal efforts. The former labors for the improvement of our knowledge of the fundamental facts and data of the science; the latter, in general, though with some prominent exceptions, for the more popular end of making celestial discoveries, not of laws, but of physical facts and phenomena. For the accurate positions of stars, planets &c., upon which all other positions depend, we look to large and organized public observatories; but as a general rule, the discoveries of asteroids, comets, double-stars, nebulas, &c., have been due to individuals not engaged in regular Observatory work. The planet Uranus was discovered by a private observer. Le Verrier's prediction was made before he was connected with any astronomical establishment; and although the detection of Neptune took place at a regularly organized Observatory, it did not follow from the discharge of regular duties, and the search was only instituted in compliance with the personal application of Mr. Le Verrier. The failure to bear in mind the true object of a large observatory often leads to a misapprehension of such facts as these; and actually sometimes to sneers, from the uninformed, at the institution, for not doing what, if done at

all, would be entirely without the line of its regular duties. A very eminent living observer, alluding to this very point, has well said:

"If you look into the history of astronomy, you will find that very few discoveries emanated from public Observatories. The institution which perhaps more than any other in the world, has assisted to advance astronomical science, is the Observatory at Greenwich, yet its annals are unmarked I believe, with a single discovery. The service it has rendered has been the accumulation of careful observations made with the best instruments which each successive age has produced, the value of which, under the present Astronomer Royal, has been much enhanced by a strict and accurate reduction. The records of this great establishment constitute a magazine of information; to which astronomers of all countries refer without doubt or hesitation."*

It has been my desire and purpose that future years should be able to speak in terms of similar applause of the achievements of the Dudley Observatory at Albany. Its two astronomical instruments,—of which only one has yet been received,—are of the class which demand the greatest labor, and reward that labor with the fewest visible results; but they are also of that class which may be made the most serviceable for the progress of astronomy.

It is evident that results undisseminated are almost as useless as no results at all; and the great aim of an organized astronomical Observatory, next to making good observations, should, therefore, be to subject them promptly to the necessary computations, and to publish them thus "reduced," as the technical term is, for the use of astronomers throughout the world. The constant publication of valuable observations, in a form fit for use, would, I am sure, constitute a far higher commendation to the favor and support of an educated community, than would Messrs. Olcott and Armsby's present plan of making the observing rooms and instruments a public show, and the grounds between the astronomers' dwelling and the observatory a park for public recreation.

The Dudley Observatory ought to add to the realm of human knowledge, to utilise and disseminate the knowledge thus added, and to furnish aid in every legitimate way to every astronomer throughout the earth. It ought not to be a place where every

* Johnson, Annual Report for 1850.

observation is interrupted by curious visiters, who suppose the establishment to be a sort of exhibition, or where the instruments are continually liable to serious disturbance by idle and meddlesome fingers, which might, by a thoughtless or even accidental touch, destroy in one second the results of the labor of weeks.

Such are, and have been, my views of the Dudley Observatory. To prevent all danger of misconception I developed them, and at much greater length, to Messrs. Olcott and Armsby in 1855, and on every subsequent occasion when opportunity permitted. They well knew and understood them; and it was this knowledge which finally prompted them to the acts which they intended should furnish a plausible pretext for "ridding themselves of the Director." In the one great hope of saving the Observatory from becoming a by-word and reproach in every land where an astronomer dwells, I have sacrificed all on earth, except my self-respect, and the regard of those who understand the enormity of this case; and with the blessing of God, so long as He gives me strength to resist all the power which overbearing and unprincipled men know how to wield, and so long as He spares my faculties and health in this unequal contest, I shall stand to my post.* If I fall a victim, it shall be in a cause for which those yet to come will know how to do justice to me and to my persecutors, and retrieve my good name. That lofty consciousness and strength-giving support, which are involved in the maintenance of eternal truth, and which have nerved others under intense physical torture, has not been mine; but there is support in that other consciousness and conviction, that in this struggle are involved, not simply the interests of an institution which could be replaced by new donations, not simply the welfare of my own chosen department of science,—but in a high degree the progress of all Science in this our land, where its support must come from the warm hearts and generous purses of the people, not from the privileged few; and where the success of an attempt to

* I did stand to my post, until Mr. Olcott's hired mob took forcible possession of the premises.

pervert a series of noble gifts to the gratification of a thirst for personal notoriety, or of a lust of personal power, must be followed by the most disastrous consequences.

I proceed to notice the prominent points upon which Mr. Olcott and his coadjutors have founded their principal accusations, both in the First and Second Attacks; giving upon each point such information as may appear consistent with reasonable brevity. And when the duties simultaneously fulfilled are borne in mind, as well as the fact, that not only have all these Observatory labors been unrecompensed, but the accompanying outlays met by simultaneous earnings from work of other kinds, and when to all this is added the task of preparing such a Reply as this,—the amount of wearing and ceaseless toil may perhaps be imagined. One of our leading scholars has lately spoken of "the indulgence usually extended to gratuitous labors in behalf of a meritorious cause." The words fell strangely on my ear.

2. *Pretexts—Renewal of Disproved Accusations.*

It will be recollected that the Observatory was transferred to my charge in December, 1857, by a compact which, though grossly violated a couple of weeks later, was ratified by the Board, January 19, 1858; and that as the premises were not then ready for occupancy, my actual removal from Cambridge to Albany was postponed at the advice of Mr. Olcott until February 20, 1858. The dwelling house was even then scarcely habitable, nor indeed was it so until the beginning of April; but despite the privations and inconveniences which the step entailed, I removed to it, together with my zealous and enthusiastic assistants. The Observatory being thus in my charge, subject only to the Scientific Council, and no pretext for dispossessing me having been found in the natural course of events, one was created for the purpose. Dr. Armsby's visits to the Observatory on the 19th and 21st of May, accompanied on the first mentioned occasion by Mr. John N. Wilder, and on the second by Mr. Robert H. Pruyn, were made for this object; and the false pretence was set up that these Trustees were treated with discourtesy in my absence by three of the

assistants, Messrs. Tilton, Toomer and Winslow. No complaint, on the subject of these alleged grievances, was made to me. They were set before the public in some remarks, published subsequently and purporting to have been delivered as a speech by Mr. J. N. Wilder, before the Trustees, and in the two attacks of Mr. Olcott, as sanctioned by his co-Trustees of the majority. The true circumstances of the case were of course known to me, as reported immediately on my return home, and are fully given in another part of this Reply. They were also made the occasion of an indecent resolution of the Executive Committee, contained in the series passed by them May 22, of which I took proper notice in the letter of May 31 before referred to. On the 4th of June, a meeting of the full Board was called by Mr. Olcott; General Van Rensselaer's resignation as Trustee, which the Board had at their meeting in March refused to accept, was taken from the files and accepted. Judge Harris was elected a Trustee, and the tumult began, which has continued to this day. Judge Harris first moved a resolution expelling me from "the service of the Trustees;" and when from the strenuous and unyielding opposition of the minority of the Board, of whom four were present, it seemed evident that such high-handed measures could not receive the sanction of the Board, a resolution was passed, to which the minority offered no objections. It notified the Scientific Council that a "want of Harmony" existed. That was its purport and intent, as the minority supposed. The Council replied, acknowledging the propriety of such an appeal, asking information on the subject, and promising to convene at Albany at a very early date. Mr. Olcott in answering, said that he would lay the letter before the Board, thus conveying the impression that he would do this in order to give official compliance to their request for information. Before any farther action, the Board was reconvened by Mr. Olcott on Saturday, the 26th of June, at which time he made the first public avowal of his hostility, by the presentation of the "Manifesto," a bitterly calumnious and vituperative assault upon my character as a man and as an astronomer, and reciting alleged grievances, almost

exclusively bearing date *previous to the time when the Observatory was placed in my hands.* This written communication (lately republished in pamphlet form as a "speech," together with a similar "speech" of the late Mr. Wilder,) was adopted at once by a majority of eight to four, as the expression of the views of the Board; and was first seen in full by the Council on the 29th of June, twenty-four hours after their arrival in Albany, although an abstract of it was published in the New York Times of Monday, June 28. The Council proceeded to investigate the charges, and published the results of their investigation, absolving me from blame. Then came the Public Meeting of citizens and the publication of their Address. Next, the Second attack of the Trustees,—public journals being meantime kept supplied with torrents of ribald abuse, and both the Council and myself remaining silent until the present time. The only exceptions to this silence consist in two letters published in an Albany journal;—the one stating the fact that my letters had been falsified, and fabricated passages inserted, and the other (written in consequence of a full denial by the nine Trustees,) asking an investigation by any fair means which could be suggested.

Although many of the accusations of Mr. Olcott's First attack, are fully, completely, overwhelmingly refuted by the Scientific Council, they are repeated in the Second Attack, with a cool and unblushing assurance, which can not but astound those who have read and can remember the refutation. Such are the charges;—Delay, Extravagance, the non-employment of the Calculating Engine, the rejection of a suitable Pier, the needless Apparatus for placing the piers, the Application for a place in Columbia College, appropriation of Moneys not my own, and numerous others, of which these are but illustrations.

3. *Studied Insults to the Trustees.*

On this point, it will suffice to quote my official report of May 23, to the Scientific Council, describing the two visitations of Dr. Armsby, upon which this charge is founded. It was as follows:

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To the Scientific Council of the Dudley Observatory;

GENTLEMEN—Inclosed is a communication from the Secretary of the Trustees, containing votes of the Executive Committee, received on Saturday evening, the 22d instant. They require no comment from me, and I should be glad to receive your views as to the course proper to pursue under the circumstances. It is only incumbent upon me to state the facts which I suppose have prompted this action, as nearly as I can learn them.

On Wednesday last, (the 19th,) Messrs. J. H. Armsby and John N. Wilder, the two members of the Board of Trustees who have been especially prominent in overt acts of discourtesy, and the ones, moreover, chiefly concerned in giving currency to the garbled letters purporting to have been written by me, which were so widely circulated in December and January last, came to the dwelling house and demanded the keys of the Observatory. Mr. Tilton, who met them, said very courteously that he did not know where they were; and in reply to the same question again repeated by both Trustees in a tone and style which he deemed offensive, he repeated the same answer in a warmer tone than before. They passed through into the Observatory inclosure, and at their request Mr. Tilton applied to another assistant, Mr. Winslow, who referred them to me, for whom they had made no inquiry. I had left the office and was supposed by Mr. Tilton to have gone to the city, where he knew that I had an engagement. About this time, however, I returned to the Observatory by mere chance, and was informed instantly by Mr. Tilton that Dr. Armsby and another gentlemen had asked to go into the Observatory, and were in a distant part of the grounds. Without hearing or knowing more, I hastened to them, although anxious to leave speedily, and immediately accosted them and invited them to the Observatory. They declined to consume my time, upon which I offered to send an assistant to them with the keys. This offer was repeated three times more in the course of a courteous conversation, in which they stated that their object in visiting the Observatory was to examine the northern boundary of the estate, where it is bordered by the railroad, and that they had not time to enter before Mr. Wilder must leave. I soon excused myself, inviting them to return at an early day, and then left, incidentally mentioning to Mr. Tilton, on the way, that they were not desirous of entering the Observatory, as he had supposed.

I had scarcely left the grounds when they again demanded (not requested) admission both of Messrs. Toomer and Winslow, one of whom offered to overtake me, and obtain authority for the purpose. The offer was peremptorily declined, the two visitants insisting upon being admitted without reference to me,—a demand to which my assistants did not feel warranted in yielding, since the peculiar circumstances of the case seemed to indicate that a responsibility which they were unwilling to assume, would attach to a compliance with the demand. The two gentlemen then peered in at the windows, pounded for a long time upon the doors, and behaved in a manner neither dignified, gentlemanly nor decent. So far as I can learn, they did not inspect the boundary at all. Their language to the gentlemen of the Observatory seems to have been irritating and offensive, while the assistants seem to have controlled their natural impulses to an extent which demands my respect and admiration.

Upon my return, late in the evening, the circumstances were immediately reported to me, and at my request they were reduced to writing the next morning. How deeply I regretted them it is needless to say. But

I do not find that in the absence of any instructions, the assistants failed to manifest a forbearance and gentlemanly demeanor strikingly in contrast with the deportment of the two Trustees. Had the possibility of such a visitation ever occurred to my mind, I should not have left the assistant-astronomers without instructions for such a contingency. The responsibility which devolved upon them appears to have been borne with firmness and discretion.

But these unpleasant circumstances were unfortunately the precursors of analogous ones two days later. The companion of Dr. Armsby on this occasion was another Trustee, Mr. Robert H. Pruyn, who had been informed that I hesitated at certifying to his bill against the Observatory of $103, for some iron drills,—a price which I considered too high.

By a remarkable coincidence this visit was on the only other occasion when I was absent in the daytime during the week. Messrs. Armsby and Pruyn did not inquire for me at all, but demanded the keys of the Observatory. Being told by Mr. Winslow that I was out, and that he had no authority to deliver them, Mr. Pruyn announced that he was a Trustee of the Observatory, and claimed admittance as such; upon which Mr. Winslow, being unwilling to give a refusal which might perhaps involve me in embarrassment, took the keys from my office and admitted the two Trustees. Mr. Toomer, entering soon after, stated, in reply to questions, that the key of the Circle-room was in my private drawer, from which he had never presumed to take anything. The language of Messrs. Armsby and Pruyn is represented by Messrs. Toomer, Tilton and Winslow as having been offensive and dictatorial. On this occasion, also, I believe that all the assistants were successful in preserving their self-control while manifesting a proper and manly spirit.

The next morning I issued a circular order, directing that no visiters be admitted without permission from me, except in my absence, but authorizing any assistant to admit them in my absence, until farther orders,—provided this could be done without interfering with scientific operations going on at the time.

In the evening I received the accompanying document from the Secretary, upon which I shall be glad to receive your views at the earliest convenient opportunity. The carrying out of the resolutions would be of course incompatible with the success of the Observatory. The Secretary Dr. Armsby, states that they were unanimously passed; and I am informed that the meeting consisted of the President, with Messrs. Wilder, Pruyn, Armsby, J. F. Rathbone and Vosburgh.

Although not strictly relevant, I may add that I am aware of but one other occasion upon which visiters have failed to obtain admission to the Observatory, and courteous guidance upon application, even without introduction, although this has consumed an amount of time more than equivalent to the working hours of one assistant,—time gratuitously and cheerfully given by the assistant-astronomers for the sake of courtesy and accommodation. The exception was on the day of Messrs. Armsby and Wilder's visit, when two schools, with some sixty or seventy pupils, came up unannounced, and I was necessarily compelled to decline complying with their application for admission,—since the rooms contained instruments, apparatus and telegraph batteries.

With sincere respect,

Very faithfully yours,

ALBANY, 1858, May 23. B. A. GOULD, JR.

On the basis of these two alleged cases of discourtesy of my assistants, in my absence, the Executive Committee passed their most indecorous and insulting resolutions, "intended" (to quote their own language) "as a rebuke to Dr. Gould, for what was deemed a studied insult, upon his part, through those in his employ, to some of the Trustees!" A pretended act of discourtesy, by my assistants, in my absence, is imputed to me as a "studied insult!" This carries vicarious responsibility farther than anybody but Mr. Olcott ever before dreamed of. In replying to them it was my endeavor to use all the forbearance due to self-respect, and most assuredly all those forms of deference due to the station of a "legal guardian." Thus arose the pretext for my attempted dismissal.

It may be well to mention that I requested of the Executive Committee any facts in their possession which could warrant such a resolution relative to my assistants, but that no notice was taken of this request. As for myself, even Mr. Olcott, in his Manifesto, bears this testimony to my personal demeanor:

"I am influenced by no feelings of personal unkindness towards Dr. Gould. In our private intercourse he has ever been courteous and gentlemanly. I am influenced only by considerations of duty to the Observatory!"

4. *Unnecessary Delay—Wasteful Expenditures.*

When Dr. Armsby, in August, 1855, sought to enlist, at Providence, the interest and co-operation of the gentlemen who were a fortnight later elected the Scientific Council of the Observatory, the Institution consisted of a building situated upon a hill, and provided with a corps of fifteen Trustees. This building was faulty to an extreme, in construction. Those portions of an Observatory which distinguish it from other edifices, were, to a great extent, wanting. There were places for meridian-apertures in the two wings and foundations for the piers; but the appliances to make them useful were wanting, and no provision existed to allow the piers to be brought inside the buildings without tearing down the walls. A dome had been built, not only unprovided with apparatus for rotation, but too heavy to permit of any rotation except by means of very powerful apparatus, and with great slowness. It was subse-

quently found, on removing the tinning which covered the aperture, that the dome was incapable of bearing its own weight, after this tin was removed; and that the racking which would result from rotating it by any appliances whatsoever, would, in all probability, cause it to fall to pieces,—destroying any instrument which might be within, as well as endangering the life of the observer. The partition-walls of the building were of massive masonry, descending nearly to the depth of the pier foundations, and only separated from them by a few feet. The tremor occasioned by every blast of wind is even now instantly communicated to the isolated piers, in consequence of the faulty construction of the foundations of the partition walls. These fundamental and irremediable errors were the types of equally grave although remediable ones.

Such was the Observatory—a building better adapted for a country residence than for an astronomical institution;—situated on the brow of a hill, below which, at a distance of some rods from the edifice, the heavily laden trains of the N. Y. Central Railroad daily travel, jarring the earth to an extent more than perceptible to the unaided sense. These prospects were not attractive to an astronomer; but the earnest representations and unbounded promises of Messrs. Olcott and Armsby, overbalanced all that was unpromising.

The gentlemen represented to us that the institution had lain dormant and effete for three years; that Prof. Mitchel had fed them on false hopes and expectations, until he had alienated all his friends; that at last the variance had become irreconcilable, and the relations brought to a close by mutual consent; that Prof. Mitchel had promised to establish an Astronomical Observatory if they would raise $25,000; but that after this sum had been collected, and expended under his direction, nothing remained but a building, to equip which would probably cost as much more; that, with proper scientific support, they were certain that an endowment might be raised which would afford an annual income of ten or twelve thousand dollars; and that if we would take charge of the scientific affairs, they would themselves be responsible for

the finances. We listened to their words and believed them to be sincere. Yet in order that no misunderstanding might exist, we told them of the needs of a first class Observatory, and of our firm belief that to establish an Observatory by providing building and instruments, without the means requisite for the support of observers and computers, would be productive of no advancement to science; but, on the contrary, would tend to the disrepute of the nation by adding to the already large number of excellent instruments in the land, which are unemployed in useful astronomical observations. They expressed a sense of the force of our reasoning and views, and promised to be guided by them; and it was distinctly understood between the Scientific Council, on the one hand, and Messrs. Olcott and Armsby on the other, that no attempt should be made towards putting the Observatory into practical operation until an adequate endowment should be secured. To leave noble instruments unused, or to leave observations unreduced, would be, in our judgement, discreditable. To reduce observations properly, requires in general an amount of time six or eight times greater than is needed for making them, and is a work which must be performed by trained computers.

At the earnest instance of the supposed Executive Committee, I visited Europe for the purpose of ordering the instruments, being absent three months; and, from that time, labored by every exertion within my power in the advancement of the great work. To say that I contributed, on an average, three hours a day during the two years, from Jan. 1856, to Jan. 1858, would probably be to make an under-estimate. With the exception of a few orders given by me, and a few purchases made at the request of Mr. Olcott and Dr. Armsby,—I had nothing whatever to do with any matter involving the payment or the receipt of money. With the exception of the money for the Meridian-circle and the Calculating Machine, (which was transmitted by me, because these purchases were made through me,) no funds passed through my hands, except such as were advanced by me for the Trustees, and subsequently refunded. The only bills, within my remembrance, which I certified for payment by the Trustees,

were for the architect's pay during a few months, for books, and for the clocks, dials and chronographs, the purchase money amounting to perhaps $2000.

It was judged best by Mr. Olcott that no general public appeal for an endowment should be made until the Inauguration; and as the period for that celebration approached, two letters were prepared by the Scientific Council, at his request, in which the amount requisite for the endowment was distinctly stated; and the opinion of the Council was strongly expressed, that it would be even better that the instruments should lie idle for a time, than to commence with an inadequate income. These letters, together with sundry letters from eminent European astronomers, taking the same ground, were printed by the Executive Committee, for use in obtaining donations, and, together with a private one from Prof. Bache, (written at Mr. Olcott's request, and grossly distorted to the reverse of its true meaning by the Accusers, on page 22 of their "Statement,") prompted Mrs. Dudley to her splendid contribution of $50,000 towards the endowment on the day of the inauguration. Mrs. Dudley's letter, and the letter of the Council, to which she distinctly refers in her own, are given in the Appendix, and may both be found in the genuine edition of the Observatory pamphlet.

Soon after this period an organized effort was made by the Executive Committee for obtaining donations in New York. The letters of the Scientific Council were printed and widely circulated, and applications based upon the guaranty thus given. Even the personal exertions of two of the Council were called upon to assist Mr. Olcott; Profs. Bache and Henry addressed the Executive Committee of the Board of Underwriters at length; and, according to Mr. Olcott's statement at the time, secured its unanimous recommendation to the mercantile community. I have not the means of knowing with any certainty either what amount has been received, or what amount has been expended.

The plans for the adaptation of the building, and for the construction of the shutters, so much harped upon by Mr. Olcott, were prepared under my personal supervision, and embody my own views. Be they good or bad, I accept the full

responsibility for them. Much of their merit in detail is due to Mr. Hodgins, the architect; but for their general character I am responsible. Were they to be constructed anew there are but few changes which I would be inclined to make. But everything pertaining to the execution of these plans I disavow and repudiate. The bargains were made without my knowledge; the contractors were persons unknown to me at the time; the amounts paid have, except in two instances hereafter to be mentioned, never been within my knowledge. This was, moreover, perfectly conformable to our understanding, that the scientific supervision was to be mine, the financial arrangements theirs. If any plans of mine could not be executed within their means, it was their right and their imperative duty to have said so at the time. Of the constant marring of my plans by the officious and ignorant,—though probably at first well intended,—intermeddling of Dr. Armsby, I shall speak in connection.

The work went very slowly on, one mishap succeeding another. Most of these mishaps could have been prevented by the exercise of ordinary discretion, on the part of Dr. Armsby, who assumed and exercised the general charge,—avowedly, except for a very short period, when I consented to do this myself,—practically always, as I soon discovered, and surrendered the brief superintendence in despair.

The delays, bad as they were for the general welfare of the institution, were not considered as vital except in so far as attended with needless expense; for it still continued to be the definite and distinct understanding, that no commencement should be made as an active Observatory, until adequate means for the support of observers and computers should be obtained. Only when the intrigues of the latter part of 1857 began was the contrary idea entertained. By the artful suppression of this fundamental fact, the authors of the "Statement of the Trustees" convey the idea, that during all this period, while toiling unremittingly for the welfare of the new institution, I was feeding them with false hopes; and for some unexplained purpose—connected with ignorance and incompetency—was delaying and postponing the completion of the Observatory.

From this brief narrative, it will be manifest how unfounded and wicked are the charges of the "Statement," covering the time prior to the meeting of January.

I aver that the "delays" neither were, nor in the nature of the case could have been, due to any agency of mine; that I toiled earnestly, unceasingly and cheerfully, for the sake of contributing my share towards the establishment of a noble institution; that the definite understanding from the beginning in 1855 was, that the Observatory should go into operation only when the adequate means should have been secured, which was their business, not mine; that Mr. Olcott assured us that these means, (an endowment equivalent to not less than $10,000 a year,) could and would be attained by the time the buildings were completed; and that all our plans for the Observatory were predicated upon this assumption.

I aver that in the expenditures of the two years, 1856 and 1857, excepting the unavoidable and very moderate outlays to which I have already referred, I had neither part nor lot; that I neither selected the contractors, gave them orders, nor knew what the bargains were; that large sums were expended without my knowledge,—to what extent I am of course unaware; that large outlays were incurred for objects which it was known that I disapproved, and others still for purposes which Dr. Armsby must have known that I would have disapproved if consulted.

I suppose it admits of no doubt that a great portion of the money given for the endowment, except Mrs. Dudley's gift, and even part of that, was expended for objects other than those for which the donations were made. I believe the plans for the modification of the building and the necessary equipments might have been carried out with thoroughness for one-third part of the cost with which it is alleged that they were attended. And that the origin of the present difficulties had much to do with Mr. Olcott's desire to conceal the true state of the finances, as well as with Dr. Armsby's petty vexation at my opposition to his injudicious, extravagant, and often absurd schemes.

5. *Nonfulfilment of Promises.*

From the beginning to the end of the Attacks, one of the chief accusations is, that I fed the Trustees on false hopes, and plied them with promises which were never fulfilled. This accusation is kept steadily in view; it is brought in distinct language more than once, is insinuated on every possible occasion, and the support of it is apparently the sole motive for the publication of many of the alleged extracts from my letters, and for the falsification of the same.

It is alleged or insinuated in unmistakable terms in the "Statement," that, among other things, I promised:—

That by my personal exertions, "the instruments could all be landed in Albany" before August, 1856, (p. 10);

That both the Transit Instrument and the Meridian Circle should be "mounted" not much later than May, 1856, (p. 48);

That the instruments should bring "into the treasury of the Observatory a very respectable and gratifying income" (!), (p. 45);

That the whole Observatory would be in working order at the end of August, 1856, (p. 18);

That at the same period "the trains on every railroad centering in Albany" should be regulated "by the click of the Corning clock," (p. 13);

That a "dropping time ball in every great city on the continent," and "all over the State" should then be governed by this same time-piece at Albany, (pp. 14, 15);

That this should also be made a source of *revenue* to the Observatory (!), (pp. 12, 14).

All these promises are distinctly stated, or as distinctly implied in so many words, to have been made by me. And, in addition to these, there runs all through their book the same insinuation, although often so adroitly conveyed that more space would be requisite for exposing it than can be spared for what is, after all, so small a part of their enormous aggregate of falsehood and slander.

Now I assert in the broadest, fullest, most unqualified, and most unrestricted language that I know how to use,—that all

these allegations of my Accusers about my promises (let alone the non-fulfilment of them), are utterly, thoroughly, scandalously false—destitute not only of truth, but even of a color of truth. I made them no such promises, nor any one of them, nor any one like them. I never promised these men anything, from the first day I ever saw or heard of them, in August, 1855, down to this present moment, except that so much of my earnest, unpurchased, devoted efforts as I could give should be at their service, to aid in the endeavor to build up a great national astronomical Observatory; one of which every American might be proud, and which might, directly and indirectly, contribute to the advancement of science in the republic. All the promises *came from them*, or rather from their active agents, Messrs. Olcott and Armsby, and *from them alone.*

They promised that no step towards putting the institution into active operation should be attempted until an endowment fund should be secured, competent to support a full complement of observers, and to reduce the observations as fast as they should be made.

They promised that they would take full and exclusive charge of the financial affairs;—leaving myself and the other members of the Scientific Council free from responsibility in every thing pertaining to money; but intrusting us with the exclusive management of the astronomical concerns of the institution.

They promised that they would abstain as far as possible from the public announcements and the vauntings through the newspapers, which were so much opposed to my wishes, and which occasioned me, as they knew, so much annoyance.

And they promised that they would use their earnest efforts towards making the institution a place for thorough scientific research, and not for popular amusement or parade.

Whether any one of these promises has been fulfilled, the reader is perfectly competent to judge.

The idea to which they still seem fondly to cling, in spite of the numerous disavowals of them by Messrs. Olcott and Armsby in past years, are, that an astronomical Observatory is to be

made a source of "revenue." And in the language which they falsely put into my mouth, the ideas of parade and pomp show that both the words and the ideas are theirs, not mine.

The "splendor of the promised Heliometer" (p. 15); "the glories of the" "Corning Clock" (p. 15); "*the largest* and best instrument of its kind *in the world*" (p. 9); "the glories of the model instruments" (p. 24); "this splendid instrument" [the Transit] (pp. 86, 133); "this splendid instrument" [the Circle] (pp. 154, 156);—such are the phrases in which these censors of astronomical attainment, allude to instruments constucted for the one leading purpose of securing in the observations, that very refinement, delicacy, "superlative accuracy," "transcendental precision," "excessive particularity," at which they have leveled the shafts of their wit and sarcasm.

Perhaps there is no better connection than this, in which to speak of the intense mortification occasioned to me by the pomp and circumstance with which these gentlemen have heralded, through the newspapers and otherwise, every step taken in the progress of the Observatory. None other than myself, excepting these two men, Messrs. Armsby and Olcott, can ever know the urgent entreaty, the almost suppliant appeals, with which I have implored them to abstain from this braggart course; none but they know, or can know, the reluctance with which I have consented to appear, to some extent, even as a party in those manifestations, in order that, by sacrificing my personal pride, and yielding in some degree, it might become possible for me to restrain them from the exuberance of still more distasteful display. This disposition on my part prompted to sundry acts and words, by which I hoped, through surrender of personal feeling, to contribute to the ultimate preservation of some dignity for the institution to whose welfare I was surrendering every personal consideration whatsoever. I well knew the ridicule which such a display of ostentation could not fail to draw upon myself; and the regret with which my scientific friends abroad would see these apparently new developments in my character; but I made the sacrifice and said nothing.

There was one special condition, upon which I insisted with Messrs. Olcott and Armsby at the beginning of my connection with the Observatory, in August, 1855. And I repeated it at every successive stage of the enterprise, even so late as Nov., 1857. This was, that no services which I might give should be deemed a pledge that I would remove to Albany. Only when the very salvation of the Institution suddenly seemed to hang upon the issue, did I decide to come. I came, leaving much, to assume without worldly remuneration, with the prospect of a probable outlay heavier than my means could well afford, the burden of an institution of which the highest expectations had been raised, yet which was represented to me privately as bankrupt in treasury, although yet unfinished; an institution whose most prominent "responsible guardians" were men such as I had begun to perceive Messrs. Olcott and Armsby to be; in a city where an organized system of malignant attack had already been actually commenced through the public press by Messrs. Armsby and Peters; and where my acquaintances were but few, and these too, as I had reason to believe, already reached, privately as well as publicly, by the poisonous slanders of these men concerning me.

The event has proved in some respects worse than I had anticipated; for I had no conception of the depth of depravity which this contest has developed and made manifest in my assailants. Apart from the public attacks to which I am now publicly replying, no means of private detraction have been too base for some of them. The ingenuity of man could scarcely devise a system of moral undermining, characterized by more low cunning and insatiate meanness than that in which the pertinacious and insinuating energies of Dr. Armsby have been ceaselessly at work during the past six months, to embroil me, if possible, with every friend whom he knew or supposed me to possess. No misstatement, no manœuvre, no intrigue has been too base or too vile. Doubtless I know of but a small proportion of them, but they are enough to excite a sense of loathing in the bosom of every respectable man who shall become cognizant of them. I have suffered them to pass in scorn and contempt.

But in other respects my residence in Albany has led to results far more comforting and cheering than it could have been warrantable to anticipate. It has blessed me with a circle of new friends, whom it has been a privilege to know and to love. Men of honor, truth and spirit, families of refinement and ennobling sympathy, have welcomed me among the number of their chosen friends and companions. Whatever be the issue of the contest, its bitterness has not been unalloyed; and the happy memories of the pleasant homes and the warm hearts which have mitigated its dreariness will never be eradicated.

Notwithstanding the totally false assertion in the "Statement," (p. 146), that "the office of Director" "had not been tendered" to me, this office was distinctly urged upon my acceptance by Messrs. Olcott and Armsby six or eight times during the years 1856 and 1857, and their solicitations were more than once accompanied by the offer of a specific salary. These offers were uniformly and instantly declined, with the remark that there were many astronomers in the country quite as competent as myself, to say the least,—a candid and correct declaration which was always gainsayed in the politest manner by these gentlemen. By men, too, who now flatly assert that, previous certainly to two of these offers and compliments, they had discovered me to be ignorant, pretentious, offensive, dilatory, wasteful, dishonorable, deceitful, overbearing, unscrupulous, intriguing, meddlesome, slanderous, grasping, insolent, reckless, and unpractical,—for each of these faults had, according to the present showing of the Accusers, been detected by them in my otherwise not altogether perfect character, previous to October, 1857. The incompetency and peculation were not detected until Mr. Olcott's attempt to "get rid of the Director," in June, 1858. This "office of Director" was repeatedly urged upon me, and as repeatedly declined, and the opportunity seized to say that, until the Observatory was ready for active operation, such services as I could render were cordially at the disposal of the institution, *provided* they were not to be considered as committing me in any way to

assume the personal charge, when the astronomical observations should commence. Remuneration for my services, and reimbursement of my expenses were certainly twice, and I think three times, offered me, and were as often declined, with the expression of my regret that I had not silver and gold also to contribute towards this useful and honorable enterprise. My reserve as to assuming the eventual charge was a matter of principle and of feeling. I meant to keep myself free and to keep the Trustees free, from any positive commitment; and to govern myself finally by considerations of discretion and duty, when the time to act upon the question should arrive. If our plans as devised should be perfected and successfully executed, it is easy to conceive of circumstances which would give me equal gratification, whether I should myself take the immediate charge, or see it placed in other hands, commanding my full confidence that the grand design of the Observatory would be fulfilled.

The idea of giving time to the cities of New York and Albany, and of furnishing time to the railroad stations, was, of course, advocated and encouraged by me,—for every man of science is glad to see his scientific labors made to contribute to the welfare and advantage of the community; and the making of such contributions to the public convenience as time-signals afford, is one of the legitimate functions of an astronomical observatory. That I offered on the part of the Observatory, to furnish the Central railroad with time for $1,500 a year, and that this time was to be furnished for the sake of obtaining a revenue, is untrue. The letter alluded to says as follows:

"Arrangements of this kind would, of course, be attended with considerable expense, and would require constant attention and care at the Observatory; and while the Dudley Observatory would feel that it was fulfilling one of its important aims in thus contributing to the material welfare of the State, it would expect from the railroad a sufficient appropriation to cover the expenses to which it would be subjected. It, therefore, proposes to furnish this time to any or all of the stations of your road,—superintending at the same time the necessary adaptation of the station-clocks, in case the directors prefer that these clocks be automatically set right at stated intervals,—and asking $1,000 a year as remuneration."

The statements, that the offer was at once accepted; that "Dr. Gould's performance of his engagement," as the Accusers call this, as yet unaccepted, proposition, made by the wish of their own agents, would have secured $1,500 of income; that it would have secured any essential income over and above the remuneration for the expense and labor entailed, are—like the analogous assertions of the Accusers relative to furnishing time-signals to New York city,—wilfully, knowingly, totally untrue. I shall refer to them in full under the head of "Clocks and Time-signals."

The attempts to make me appear responsible for the non-completion of the Heliometer, the Meridian Circle, and the Normal Clock by the specified time, are palpably unjust and unreasonable. I did my best, obtained the promises of the makers, selected men at once responsible and competent, and, in the case of the Heliometer, the very one whom the Managers urged upon me. These men are capable of answering for themselves; and only a bitter determination to persecute, and to "crush" at all hazards, could have prompted the nefarious scheme of holding me up to public odium, in consequence of the non-completion of the instruments at the expected period. To make me out as blame-worthy would be ungracious under any circumstances, if I tried to do well, and labored out of devotion to the enterprise alone. It is iniquitous, unless it can be shown that I did not exercise my best efforts in behalf of the Observatory, or that these best efforts were indiscreet, or that I was accessory to the delay. The authors of the pamphlet well knew, that no exertions of mine were wanting to accelerate matters, and that the artists of the Circle have made out a very strong case for themselves in excuse for their delay.

6. *Incompetency and Peculation.*

The accusers quote, on page 110, the language of Mr. Olcott, in his Manifesto, as adopted by the majority:

"The truth," he says, "*in my judgement*, lies in a nutshell. It is a discreet unwillingness to test his skill as a practical astronomer."

If this does not mean to charge incompetence, as an astronomer, the words have no meaning. But this Second Attack contains an ingenious argument of some pages, to show that, after

all, there was not much of a charge made, if any; but taking care, however, to repeat the identical accusation. The "Statement," says:

"Much ado has been made by the Scientific Council and their sympathizers, about these charges of incompetency and peculation. Under the head of 'Incompetency,' in the 'Defence,' the Scientific Council say, "We cannot refrain from expressing our astonishment that Mr. Olcott should presume to pronounce a judgment in this case." The sympathizers, too, affect to be greatly shocked at the temerity of Mr. Olcott in thus daring to decide upon the scientific qualifications of Dr. Gould. The prominence which these gentlemen have given to this point and their loud expressions of indignation have not been without their effect. They have led some honest men to believe that there was something in it; and that, really, Mr. Olcott had done some great injustice to the scientific reputation of Dr. Gould." (pages 108, 109).

What else could any candid man believe? The words are pointed; they admit of no escape; they charge that I did not mount the instruments on account of "a discreet unwillingness to test his [my] skill as a practical astronomer."

The Accusers go on:

"That there may be no misapprehension about it, and that equal justice may be done, it will be worth while to go back and see what charge had been made against Dr. Gould in this respect."

and proceed with an elaborate mystification under the guise of a history, in the course of which they remark:

"Others may not have had the courage to express it, but Mr. Olcott was not alone in the opinion he entertained."

"This was Mr. Olcott's opinion. It may be the opinion of others. The Scientific Council entertain a different opinion."

It has been well remarked, that the public suppose me to be contending with these Accusers for some good place, some fat salary; that it is impossible to believe, that my services have not only been unrecompensed from the beginning, save by my own conscience and the support and approval of beloved and honored friends, but also that the operations at the Observatory have been supported and carried on by means of my slender earnings alone. This is, however, the simple truth; and the knowledge of it may perhaps not be without its influence in suggesting to the reader the character of the motives which animate my persecutors.

It is in connection with this charge of incompetency, that the Accusers allege, that "for nearly three years, Dr. Gould had been promising great things for the Observatory, but accomplishing nothing;" a most scandalous, ungrateful and unprincipled misrepresentation;—false in the statement and false in the inference.

The precise reverse of their statement is much nearer to the truth; for, having promised nothing, I had yet accomplished much. During this period, I had actually worked up the plans for the changes in the building, and, under the Executive Committee, had labored for their execution; had devoted myself zealously to procuring instruments in conformity with my own views of construction, and in giving constant advice as to the preparations for their accommodation; contributing all this labor, time, and thought, while engaged in other occupations necessary for my support, and rendered more than usually severe, by the necessity for heavy additional labors to make up for a three months absence in Europe, also in the gratuitous service of the Dudley Observatory. Finally, I was in no degree responsible if nothing had been done; for during this whole interval, I had, except for a brief period, not even nominally the charge of affairs at the Observatory. All these labors were well known to Mr. Olcott and Dr. Armsby, if not to the rest of the Trustees, when Mr. Olcott in his Manifesto uttered the base innuendo:

"Why do these noble instruments remain so long in their boxes, when every astronomer, conscious of his own ability, would pant for the unfolding glories which they are expected to reveal?"

This sentence was written in June, when it was known to the author of the attack, and to some, at least, of his supporters, that the meridian circle was already actually "mounted," and that the clock and chronograph had been in working condition for nearly two years. The same sentence, with its absurd rhetoric, is adopted and approvingly repeated in the Second Attack. The "Statement" is emphatic in insisting that what Mr. Olcott said, and

"*All* that he said, in reference to the *incompetency* of Dr. Gould,"

was this:

"The truth, *in my judgment*, lies in a nut-shell. It is a discreet unwillingness to test his skill as practical astronomer;"

as if all this went to prove that the charge had not been made! Forgetting that the majority had themselves indorsed the charge, or hoping that the public might forget it, the "Statement" introduces Mr. Olcott as bringing the charge upon his own responsibility, while at the same time it proceeds with the full sanction of the same majority to sustain it by the significant and contemptible suggestion,

"Mr. Olcott was not alone in the opinion he entertained,"

and

"Mr. Olcott's opinion . . . may be the opinion of others."

Following an attempt to excite prejudice against those who had defended me, comes a reluctant admission that the world

"May place a higher value upon the opinion of Professor Bache and Prof. Henry and Prof. Peirce, than upon the opinion of Mr. Olcott."

Still, in the judgement of the signers of the "Statement," this is only "opinion against opinion," for they say,

"It is certain that the skill of Dr. Gould, as a practical astronomer, remains to be tested."

"It is certainly true, that it has not been tested at the Dudley Observatory;"

A thoroughly false statement, backed by what certainly would be a truth, if the Managers had had ingenuity enough to put a few more obstructions in my way! And finally the Accusers sum up the matter by saying that it is very likely,

"That the professional reputation of Dr. Gould may suffer serious damage, as the result of this controversy," &c.

"But it will not be because, in looking around for a cause to which to ascribe the unaccountable procrastination which has characterized his whole career in the Dudley Observatory, Mr. Olcott came to the conclusion that such cause was to be found in his distrust of his own ability, as a practical astronomer."

A miserable rigmarole of words, the English of which is this:—Mr. Olcott did impute to Dr. Gould a conscious incompetency, and now declares that Dr. Gould's professional reputation is very likely to suffer as the result of this charge; but yet, somehow,—Heaven may know how,—it will not be because the charge was made! It signifies, moreover, nothing to Mr. Olcott, that this same Dr. Gould, who is charged elsewhere by

him with arrogance and conceit, is here made to distrust his own abilities; or that this same Dr. Gould, who, according to the unblushingly mendacious assertions of the "Statement," whined in the presence of the Trustees in January, in the most humiliating manner, and begged them to "give him their votes" for Director,—did all this in order that he might have the opportunity for displaying his ignorance of mounting and using the instruments and might thus damage seriously, if not altogether destroy, his reputation as a practical astronomer!

What a specimen of argument is this for intelligent men to employ! Yet this is the manner in which this pamphlet handles so grave a question as the professional competency of one to whom honor and repute are supposed to be worth something—of one whom the Accusers themselves, with full knowledge of him, and with all their faculties about them, had so recently placed in the sole and exclusive charge of the Dudley Observatory; this is the manner, too, in which they expect to impose upon the good sense of the community.

I pass to another topic. The Accusers utterly deny that the charge of peculation or dishonesty was ever made against me.

"The only other charge," they say "which the Scientific Council regard as serious, is that which they choose to designate as "*peculation*," and in another place they speak of it under the name of *dishonesty*. That any such charge has been made, or even intimated against Dr. Gould, is the merest pretence."

Referring to a letter of mine, in which I had alluded to the fact that while myself and my assistants were devoting our leisure time to the Observatory, we were still pursuing our accustomed labors in determining longitudes for the Coast Survey, on which our subsistence depended,—Mr. Olcott affected to believe that the "longitude determinations" therein spoken of, meant nothing else than the particular and gratuitous service (so far as our labor was concerned), then in contemplation, of determining the longitude of the Observatory for the State. And he thus declared in his Manifesto:

"This disclosed the fact which now, for the first time, comes to our knowledge, that not the Coast Survey, but Dr. Gould, individually, pockets, in addition to his salary, the very considerable income from longitude determinations. This truly solves a problem, as he states, and explains his past anxiety to grasp the legislative appropriation."

The "Statement" quotes this passage and then coolly asks whether there is in it "anything that, by any possible implication, involves a charge of *peculation* or *dishonesty*!"

It is not necessary to go into legal definitions. The charge had relation to the sum of $600, of money from the State, placed in my hands to cover the actual cost to which the United States Coast Survey had been put in determining a point of longitude for the State. And Mr. Olcott professed to have discovered that somehow, no matter how, whether by or without collusion on the part of the Superintendent of the Coast Survey, this sum of $600, or some secret and unknown amount of profit out of it, was pocketed by me individually. And to this actual discovery of my peculation, dishonesty, or fraud, call it what we may, was added the avowal of a belief on the part of my Accusers, that any anxiety I had exhibited to secure, to the use of the Observatory, the balance of the State appropriation, amounting to $1400, had arisen solely from my desire and purpose to appropriate that sum, or some undefined portion of it, dishonestly, to my own use.

It is in reference to these palpable imputations of infamous conduct cast upon my character, and after they had been indignantly repelled and the clear proof of their gratuitous falsity presented by the Scientific Council in the "Defence," that Mr. Olcott dares to ask "the candid reader" of the "Statement," whether "by any possible implication," these imputations involve a charge of peculation or dishonesty.

But Mr. Olcott, while he was anxious to relieve himself of the odium of having originally made the charge, was equally anxious and resolved that I should not be relieved from the infamy it involved. He actually proceeds, therefore, to adduce testimony (the utter fallacy of which I shall expose in another place), to show that the actual cost, to the Coast Survey, of the longitude measurement in question, which I had declared to have been $928.94, was probably less than $200, so as to leave the inference of a wide margin for dishonest profits; and he winds up a lengthened commentary on the whole case, in this aspect, by declaring that he, calling himself, as he often does, 'the Trustees,' is not

"yet able to determine how the matter stands between Prof. Bache and Dr. Gould, * * * whether the $600 received by Dr. Gould belongs to him, or to Prof. Bache, or to the Coast Survey," &c., &c.

He repeats, in this characteristic manner, that there was peculation or dishonesty somewhere in this transaction; and that if I did not pocket dishonest profits out of the money of the State, or the Observatory, Prof. Bache did, either for himself or for the Coast Survey!

This attack upon the Superintendent of the Coast Survey is in continuation of the policy which I have already exposed. The Accusers present a letter, obtained for the purpose, from Mr. W. C. Bond,—whose connection with the Coast Survey is well known,—in order to show that the longitude determinations of that work cost more than they should, and to invite investigation! The malignity of thus bringing a national work into question, and running the risk of injuring it, because the gentleman who is its Superintendent is engaged in a controversy with them about the concerns of the Dudley Observatory, is too obvious to require comment. It is as if the members of the Scientific Council should go into the concerns of the Mechanics' and Farmers' bank, of which Mr. Olcott is President, and attack them, and his investments and expenditures, and seek to produce a panic in regard to the manner in which its affairs are conducted, and in regard to the solvency of the institution. The baseness of the attack on the Coast Survey is greater, in the same proportion that a national and scientific establishment is more important than a local and financial one. A letter "procured through the kindness of a friend," from Mr. Bond, is quoted to prove that an unnecessary expenditure was made in the longitude determinations. To make a trustworthy estimate on this subject required that the data should be carefully furnished. That this was not the case, Mr. Olcott know.

Mr. Bond himself says:

"If, as I understand is the case at the Dudley Observatory, the Transit instrument is in position and the Clock properly arranged,"

thus referring to a state of things which Mr. Olcott, at least, *knew* did not exist at the commencement of the longitude operations. There were two Transit instruments belong-

ing to the Coast Survey, on the premises—the large and the small one: Had the former been employed, the cost of putting it up and adjusting it, alone, would not have been less, and would probably have been decidedly more than $150,—three-fourths of the sum now named by Mr. Bond for the whole expense of the longitude determination. The small Transit—an instrument obtained and employed by the Coast Survey for this purpose only, one decidedly preferable for the purpose, and the one actually employed—required a foundation pier and a building for shelter, the combined expense of which could not be much less. But a more full discussion of this particular point will be given elsewhere.

The appropriation of $2,000, from the State, it is understood, was procured by the lobby agent of the Trustees of the Dudley Observatory, Mr. R. H. Pruyn; and the Trustees are responsible for procuring it, as well as for the use they make of it.

Six hundred dollars, and no more, have been paid by them, and the arrangement by which the Coast Survey and the State of New York has divided the cost of a work required by each, has been mutually advantageous to the government of the United States and to the State.

But I must notice another base accusation in this connection. The Accusers say :

> "It may be proper, also, here to state, that, since the proposition to undertake this work was made in January, Dr. Gould has stated to several members of the Board of Trustees, that it would occupy TWENTY-FIVE months, and that the work would be of such a character as to render it impossible to do any other Observatory work during that period." (Page 116.)

It is positively untrue that I have ever stated, to any one, that the work would occupy twenty-five months, or that it was of such a character as to make it impossible to do any other Observatory work during that period. I give these assertions the fullest, broadest denial. The work was not to interfere with Observatory work at all; as is perfectly evident from the fact that I was to do it as additional Coast Survey work, and that it would consequently have nothing to

do with labors performed as Director of the Observatory. And yet these six lines and a half are but a specimen of this pamphlet, which purports to give a "statement" of facts!

The mystery which these ingenious special pleaders would throw around the subject does not exist. On the contrary, the expenditures are explicitly stated, item by item, in the "Defence,"* and the affair has no mystery about it whatever. The receipts for payments made, have been all examined; and are subject to the inspection of any respectable man who has the curiosity to examine them. The amount expended has been as stated by the Scientific Council in the "Defence," $928.24, of which six hundred dollars were received from the Trustees and paid out by me, duplicate receipts being taken in due form. I affirm that every economy was used in the determination; that the observations were thoroughly, carefully and laboriously made by the same thoroughly trained, skilful and conscientious persons who make the other telegraphic longitude observations of the Coast Survey; and that two important points within the limits of the State are now satisfactorily connected with the meridian of Washington.

But we have not yet arrived at the end of the side issues strung upon the "peculation" matter, for next comes an attempt to embroil not only Prof. Peirce and myself, but also Prof. Bache with Prof. Mitchel, with whom he has been and is, in official as well as friendly relations. There is not space here to go into this; but in passing I would observe that the apparatus devised and used by the gentlemen in the employment of the Coast Survey for the determination of longitudes, has a different object and aim, and is in itself entirely different from that commended by Professors Peirce and Bache before the American Association. What hardihood must it not require to induce men to undertake to turn the generosity and candid speaking of those scientific men as a weapon against themselves. Is not the fact that Professors Peirce and Bache took such an opportunity to praise Professor Mitchel's invention, a proof that they are not likely to slight his claim? Their

* "Defence of Dr. Gould by the Scientific Council," page 70.

remarks have never in any shape been withdrawn or modified, so far as I am aware.

It may be said the Accusers probably did not know the difference between the apparatus of Prof. Mitchel, and that employed by the Coast Survey for determining longitudes. My answer is, that they were bound to know their facts before bringing charges; and that this was a topic wholly foreign to the Observatory controversy, and could only have been brought into it from a spirit of demoniac vindictiveness.

7. *The Meridian-Circle.*

When I removed to Albany the large piers which support the meridian circle, were already in position; but nothing had been done towards cutting the channels for the axis, the microscopes and the illumination tubes; and the piers had not yet been cut down to the exact height required. Before the instrument could be so mounted as to be usable, it was requisite to cut all the channels, and with a precision of which those unacquainted with delicate astronomical instruments can have no conception.

On the 6th of March, the eleven boxes containing the instrument were opened and thoroughly examined. All the parts, excepting the great tube, were taken out, and the fixed portions carefully measured to furnish the basis for the necessary drawings; and a check against any possible accidental error in the dimensions as given by the makers. The preparations for stone-cutters' work were then begun.

Two cylindrical canals, 6 inches in diameter, and eight similar ones, 2.6 inches in diameter, were to be drilled *horizontally* through piers of hard stone two feet thick, and without allowing the drills to swerve at all from the prescribed direction. A large piece of peculiar shape was to be cut out from the side of one of the piers; and a precisely similar piece made to fit the cavity. Numerous other places were to be carefully chiseled or drilled away, for admittance and adaptation of the different parts of the instrument.

Much care and time were necessarily devoted to the preparations. Every line was of course drawn beforehand on the stones, and full-sized corresponding plans prepared for the

guidance of the stone-cutters. These preparations occupied between two and three weeks, and went on quietly and evenly, despite the constant taunts from certain members of the majority of the Board, both through the public press and through the many avenues of public rumor, industriously supplied with new material by the activity of my former assistant Dr. Peters, and of Dr. Armsby. Of all this I took no notice, intending that the work should be done with the deliberate care necessary for insuring the accuracy demanded. It will be remembered that the regular official work of the Coast Survey went on meanwhile, and that only the leisure hours were available for Observatory work.

The plans being laid down on paper, and also drawn upon the stones themselves, the stone-cutters were put at work. And to the skill and professional pride of the worthy mechanics, Messrs. Brooksby and Rowland, I desire to express my great indebtedness. They accomplished a most difficult and tedious undertaking, to my entire satisfaction. For seven weeks the work of drilling, cutting and chiseling, went on; the nature of the case preventing rough and rapid execution, as well as the employment of many men at once. The time was also much protracted by the difficulty of obtaining proper tools, those furnished from the first work-shop breaking almost as fast as they were tried. By the adoption of another form, and the employment of chilled cast-iron drills instead of steel, the work was successfully accomplished,—the deviation of the axial line from absolute horizontality, and from absolute perpendicularity to the meridian, amounting in no one of the ten canals to so much as the eighth of an inch, and averaging less than a tenth. The accuracy of the cavities for the axis of the instrument was truly marvelous, and only explicable by attributing a part of it to good fortune. For when the tubes which carry the Y-bed were slid into these cavities, without cement of any kind, the adjusting screws being first placed in their mean position, and the position of the Ys then determined by observations made with a small telescope adjusted perpendicularly to a wooden provisional

axis, the error of the line joining the centers of the Ys proved to be only 2s.7 in azimuth and 21s. in level. A change of less than seven hundredths of an inch in the position of the two axis-canals would have made their centers absolutely in an east and west line, and truly horizontal!

The work of stone-cutting was completed about the 10th of June, upon the main piers, and about the 16th upon the collimator piers.

Meanwhile the preliminary work for casing and clothing the four piers had been going on. The clothing had been woven in New York, and the wooden casing made in Albany, ready for fitting the piers.

While the upholsterers and carpenters were fitting the clothing and casing, the work of setting the hubs, &c., commenced. With the assistance of Mr. Spencer this was speedily accomplished, both on the Circle and the Collimator piers. This work, and that upon the subsidiary apparatus, were in great measure completed during the next fortnight, and finally, on the 25th day of June, one day previous to the tremendous anathema of Mr. Olcott, (unknown to, and unsuspected by, me until the 29th,) I had the satisfaction of seeing the instrument in position, complete so far as the transit-element was concerned, and of making the first preliminary observations. As a matter of precaution, the circles were not placed upon the axis, since the means for their adjustment was not at hand. But on the 30th of June the circles were temporarily placed in position, and the whole complete instrument placed upon the Y-beds, in presence of the Scientific Council.

On the 26th day of June,—while the instrument as above stated was already in place, and after observations had been made with it,—Mr. Olcott said, in his Manifesto, deliberately adopted by the Majority as their own statement to the public, published in the newspapers, and since then in pamphlet form:

"The magnificent Meridian Circle has been on hand since October last, and nothing has been done towards mounting it, except drilling a few holes in the piers, until within the last week."

It is difficult to understand in what Mr. Olcott supposed the

"mounting" of a Meridian Circle to consist. He was in error in saying that it had been on hand since October, 1857, inasmuch as it did not arrive until November 10; but this is a trivial mistake. The understanding, until the compact of December, 1857, had been, that it should not be put up till resources were at hand for providing support for an observer and the means of reducing the observations.

For some time subsequent to the first fierce attack of the Accusers, the condition of affairs at the Observatory precluded any active work by myself, personally, with the instrument. The Council, being present, engaged in an immediate and detailed investigation of the charges of Mr. Olcott and the majority, and in the publication of the results of their inquiry. Meantime they were themselves expelled by the Board from their office as Scientific Council, so far as a resolution of the Board could do this; and the unhappy state of things was brought about, with which the public is familiar. My official labors went on, and such Observatory work went on also, through all this, as was practicable. Although I was unable to do much towards observing, yet the time was improved to complete the nice work of fitting the casing, coating it with shellac, painting and varnishing, putting on the gas pipes, adjusting the collimators, &c.

The steps, for access to the different parts of the instrument, for reading the microscopes, the nadir-point, &c., &c., were made, not on the plan I had intended, but on another, more consonant with my limited means, and which I trust will be adjudged not only neat but appropriate; mercury-boxes were constructed, to obviate the tremors arising from the close vicinage of the railroad, and the numerous little accessories put in complete order. The position of the circles was adjusted, as also was the weight of the counterpoises and the direction of the microscopes.

Within a few weeks the work of observation has been commenced, the instrument brought into nice adjustment, and the determination of the several instrumental corrections undertaken. I am now* engaged in observations preliminary to the

* This was written in December.

formation of a catalogue to contain the position of every star visible to the naked eye, between the limits of 40° and 95° of North Polar Distance, these limits including all stars likely to be needed for latitude observations in any part of the United States, Europe or Asia, for which the Radcliffe Catalogue has not already provided the necessary star-places.

It was far from my purpose and wishes to make the idea of this Meridian Circle the basis of any claim for applause. Should opportunity permit, it is my hope to publish a full description of it at some not far distant period. My colleagues of the Scientific Council saw fit to express their approbation and approval of its peculiarities, in language with which I could not but feel especially gratified, as being an unqualified encomium from three out of the limited number of men in the country, who were competent to pronounce an opinion. Having allowed the commendation to pass without any disclaimer, it now becomes my duty, however distasteful, to prove that their strong approval was not an idle exaggeration, and a token of ignorance or of partiality on their part; as also that I did not appropriate to myself merit which was not my due. I will, therefore, give a condensed statement of some of the chief points in which this instrument differs from all others, and by which I trust that, with the aid of the accomplished and experienced mechanicians, Messrs. Pistor and Martins, it may have been my privilege to contribute something towards the improvement of astronomical appliances.

It was my endeavor to convey to these eminent artists clear ideas of the character of the improvements which I had desired, leaving them free at the same time to decide upon the mechanical details by which these ideas were to be practically realized; and, in addition to these peculiarities of structure, I desired that they should also introduce all additional refinements which their experience might suggest, provided these should, on examination, be found compatible with the fundamental ideas which I intended to incorporate.

On the 27th of August, 1856, the day preceding the formal inauguration of the Observatory, I presented to the American

Association, then in session at Albany, some account of the principles which had guided me in giving the directions for this instrument, and described the prominent characteristics of its construction. This communication is printed in the proceedings of the Albany Meeting, p. 113, from which I will extract, at some length,—with one or two slight modifications:

"The meridian instruments now in use in the several observatories of the world, may be classified in two divisions,—which may be designated as the English and the German styles; and perhaps be justly described, the one as the instrument of the engineer, the other as that of the artist. For the former the circles are large and massive, frequently having a diameter equal to the entire focal length of the attached telescope; in the latter they are smaller and slighter.

"The new transit-circle of Professor Airy, at Greenwich, typifies the English style; and this instrument, with its counterpart at the Cape of Good Hope, presents the merits in the most conspicuous and impressive form. It is of iron, cast in a single piece; incapable of reversal,—for which the observation of collimators is substituted; without a striding or hanging level,—this apparatus being superseded by observations of the meridian thread as reflected from the surface of mercury; the circles are six feet in diameter, and placed close to the tube; one only is graduated, being read by six diverging microscopes firmly imbedded in a massive compound pier; and the pivot-forms are investigated by means of a collimating apparatus, of which the axis of rotation itself forms a part.

"The instruments of the German school are of an entirely different order,—lighter and more mobile, and are made to rest upon comparatively small and slight piers, designed merely for bearing the weight of the instrument. Their circles are small in comparison with the length of the tube, and placed near the extremities of the axis; the microscopes are supported upon a frame concentric with the axis, and form one system,—the position of which is known by means of an attached level, whose indications furnish a correction to be applied to the mean of their several readings. The level is used, indeed, whenever its use is possible, and a great part of the precision of the results of observation is dependent upon the delicacy with which this highly trusted instrument may be constructed and used. Frequent reversals of the instrument are deemed indispensable; and in general the structure is devised with a view to easy, rapid and frequent changes in the relative position of all those parts which may be rendered movable.

"To sum up,—the one class of instruments is designed for securing absolute uniformity of circumstances in all observations; the other, for attaining as great diversity of circumstance as is consistent with the retention of the same degree of accuracy.

"The meridian-circle for the Dudley Observatory has been ordered of Messrs. Pistor and Martins, of Berlin; and in its form and the fundamental principles adopted, my aim has been to avoid the prejudices of education and the prepossessions of taste, and if possible to exercise an eclectic judgement,—using however the greatest care to shun such a composite form as would impair the unity of idea, and fail of the preponderant merit which both the English and the German forms may claim, in being consistent

developments of their fundamental idea. All this seemed not impossible; nor indeed did it seem beyond attainment to combine with such an eclectic form sundry new, and by no means unimportant, additions. This has been the endeavor, and it remains to be seen how sound may have been the foundation for these hopes and expectations.

"The object-glass is from material furnished by Messrs. Chance Brothers, of Birmingham, and made under the supervision of Mr. Masselin. It was my earnest desire that it might be ground and worked into form by some one of our own accomplished artists, but the Berlin mechanicians were unwilling to entertain any proposition of the kind,—desiring to take the whole responsibility, if any—and were so strenuous that I refrained from pressing the matter. The clear aperture is ninety French lines; the focal length, ten English feet.

"Both circles are divided, and capable of rotation round the axis, and they are read by means of four microscopes firmly set in each pier,—horizontal, not converging, although the divided silver limb is slightly oblique to prevent the dazzling image of the lamp from blinding the observer's eye. The piers being two feet in thickness, and the microscopes read from the outer side, these microscopes are not far from twenty-five inches in length,*—a circumstance which gives rise to various not unimportant disadvantages; but the ingenuity and skill of Mr. Martins have surmounted the chief of these, the large amount of expansion and contraction of the metal due to changes of temperature, with great success, by leaving the metal tubes free to extend or recede without hindrance, and without affecting either the distance of the lenses or their fixity in the stone.

"To obviate the chief disadvantages of attaching the microscopes to the piers, namely, those arising from the unequal changes in the piers themselves, these will be coated with oil, or some other preparation for excluding moisture, wound around with list or baize, and then encased in wood. With these precautions, I am very confident that we are justified in awaiting from this more massive construction greater advantages than would be derived from the metallic connection of the microscopes, although continually subjected to scrutiny by means of the attached ether-level.

"The circles are three feet in diameter, and entirely protected on the outer side by the piers. They are of the form which long experience has recommended to Messrs. Pistor and Martins as the best,—not too heavy at the rim, and with radial arms thickening in both dimensions towards the center . . . . . .

"The eye-piece has a vertical as well as a horizontal motion; and the diaphragm, which is of course adapted for chronographic observation, is provided with both a horizontal and a vertical micrometer,—the former being especially intended for the observation of polar stars.

"The method of Hansen for measuring and eliminating the effect of flexure comes from an authority too high, and commends itself too strongly, to justify us in lightly setting it aside. But advantages entirely incompatible with its employment presented themselves in such number as to induce me to accede to the earnest recommendation of the artist, and abandon the original plan of interchangeable eye-piece and object-glass. . . . The interchange of object-glass and eye-pieces presupposes either the absence of unsymmetrical parts within the tube, such as the apparatus for illumination and the shafts by which we regulate the amount of light admitted, or the disconnection of these from their gearing or screw-heads.

* It was subsequently decided to shorten these to about two feet.

Indeed, nothing like the former can be reasonably demanded,—a sacrifice which seems disproportionate to the end to be attained. Moreover, the new meridian-circle is equipped with more than a usual amount of internal mechanism, although the arrangement and support of this latter has been planned with an especial view to avoidance of any prejudicial effect arising from unsymmetric distribution of weight. The measurement of flexure may take place without disturbing the adjustments or parts of the instrument, by some apparatus analogous to the neat and practical contrivance of Professor Challis, who arranges a pair of collimators in such a manner that they are used in connection with each other at any desired angle of altitude. Moreover, the reversal of the instrument admits of a scrutiny and check upon the determinations, which provides all needful safeguard against erroneous results.

"The circles are to be divided to 2′, and read by microscope to one-tenth of a second. The unit's place of the degree is always to be visible within the field of the microscope, and the decades of degrees engraved upon the rim of the circle. The finders read to 10′, and by vernier to 1′.

"The axis is turned within as well as without, a precaution upon which I also insisted with regard to the tube. The cube measures thirteen inches and a half on each side, and the pivots are two inches in diameter. The difficulty of obtaining a satisfactory and suitable homogeneous piece of metal for the axis, may be estimated from the circumstance, that, even in Berlin, justly renowned as is that city for knowledge and skill in everything pertaining to the founding of metals, three successive castings had to be rejected before a satisfactory piece could be obtained; and even then it became necessary to deviate from the original plan,—not, however, as I trust, to the disadvantage of the instrument. The weight of the axis is about 350 pounds.

"The illumination will be entirely by gas,—the light designed for the illumination of the field entering by one pivot, and that for the threads by the other. Arrangements are made for illuminating with lights of different colors, and for observing, when occasion requires, with bright threads upon a bright field.* The levels are boxed, provided with air-chambers, and read from end to end, not from the middle outwards.

"In fine, it has been my endeavor to incorporate in the design of this instrument, the principle,—never before attained, so far as I am aware,—that every instrumental correction, without exception, should be capable of determination by two entirely distinct and independent methods; and in this respect also to combine the advantages of the German and the English forms. And I may claim for the new instrument that its errors of graduation, its errors of flexure, collimation, level, azimuth and nadir-point, may all be determined by two separate processes, free from any dependence, direct or indirect, upon each other. And whatever may be its errors of construction or of mounting—errors must exist in every work of human hands—there is no fear that they will escape detection and accurate measurement. So earnest has been my desire to lose none of the advantages on either side of questions upon which experienced astronomers differ in opinion, that no point of detail has been deemed too minute for the application of this idea of duality, and I have even requested the artists to provide one set of microscopes with crosses, after the fashion of Troughton, and the other with close parallel threads, according to the custom of Repsold and the almost universal usage of the German mechanicians.

* This arrangement was subsequently modified.

"If this eclectic spirit shall prove to have been successful in attaining its ends without the sacrifice of unity, of artistic or theoretic elegance, of convenience, or of any scientific advantage, the care and labor bestowed upon the decision of the principles which should rule its design will be more than rewarded. But here, as in all instruments of a high order, it is the mechanical artist to whom most of the success is due, and whose refined delicacy of judgement, taste, and skill we must thank for the chief advances of modern astronomy. Bessel once said that he could determine the place of a star with a musket-barrel and a cart-wheel. Few things were impossible to Bessel, but you will agree with me that at any rate even he, with such appliances, would hardly have determined so large a number of precise star-positions as, thanks to the genius of Fraunhofer, Reichenbach and Repsold, are contained in those noble Königsberg volumes, and suffice to render the names of the artist and the astronomer alike immortal."

Strange as it may seem, to those who have read the letter of Dr. Brünnow to Mr. Olcott, on pp. 155, 156, of the "Statement," this same Dr. Brünnow was sitting close by me while I made this communication, and, at its close, expressed in cordial language his congratulations and compliments. And now, with a neat ambiguity of language, he says:

"*But, with this exception, that the level of the Olcott Circle hangs on the same part of the pivots, which rests on the Y pieces, I have not found anything in the construction of the instrument which has not been applied before in the construction of the Ann Arbor and of the Greenwich Circle.*"

In the expression, "*applied before in the construction of the Ann Arbor and of the Greenwich Circle*," the writer has used ambiguous terms, which divert attention from the fact that these two instruments are entirely dissimilar,—while he may also screen himself from the charge of that very error, which his language is adapted to convey to the uninformed reader. Every consideration of charity compels me to assume that he intended to say "the Ann Arbor OR the Greenwich Circle;" and that the use of the word AND is due to his want of entire familiarity with English idiom. By this assumption alone, is it possible that his statement can be defended against the charge of intentional misrepresentation. His letters, as they stand, place him in the attitude of giving aid to a cabal against one who had been his constant, unwavering and devoted friend, and of being willing to injure him by undermining at once his reputation for honor, and whatever credit astronomers might be disposed to award him for success in a laborious effort to plan an

instrument, not unworthy of the new Observatory, or of the present state of instrumental astronomy.

Were there no feature of this Meridian-circle, which does not enter into the construction *either* of the Greenwich Transit Circle *or* of the Ann Arbor Meridian Circle, still the successful combination in one instrument of many of the prominent advantages of two others,—so different in their nature and appearance that no one unacquainted with astronomy, would suspect them of being intended for the same purpose, and which, although intended to attain the same end, aim at its attainment by entirely different means,—would constitute a full title to be regarded as a new form of construction. Even in this view, the language which Dr. Brünnow employs, would convey an untruthful and injurious impression. But there *are* other features in this instrument, and I will now specify some of the peculiarities of this Circle which exist *neither* in the Greenwich *nor* in the Ann Arbor Circle, in addition to the leading and characteristic peculiarity of the Albany instrument, namely: that every error and correction is capable of direct investigation by two different and independent processes, thus affording the observer the means of a thorough check and control upon the results of every investigation.

(A.) The Microscopes.—These are connected by the substance of the piers, in which each is fastened by solid cement, and which are monoliths, perforated as little as possible.

Although the tubes are metallic, their expansion and contraction are so compensated as not to affect the value of the micrometer divisions.

(B.) The Circles.—The plane of the graduated silver limb is not perpendicular to the axis of the microscopes, and the division-readings are thereby relieved of the glare of an illuminating beam, reflected directly back to the eye.

There is no setting pointer, but some graduated number or means of identifying the reading is always in the field of every microscope,—the decades of degrees being, however, marked upon the rims for convenience.

(C.) The Illumination.—The illumination of the field, the threads, and the limb for all the microscopes for each circle, as well as of the clock, takes place by means of only two gas-lights, at a distance of three feet from the piers and five feet from the circles; all radiant heat having been meantime cut off.

Before reaching the graduated limb the beams of light traverse nearly seven feet, undergoing two reflections, and being essentially divested of the accompanying heat,—the requisite amount and intensity of light being attained by means of parabolic reflectors. The beams will be made to traverse a screen of alum water, if any effect of radiant heat is detected.

The threads are illuminated upon a dark field by four prisms 90° apart, thus illuminating both sides of the horizontal and the vertical threads symmetrically.

Both field and threads may be illuminated with colored or with white light.

(D.) The Telescope and Axis.—The object and eye ends of the telescope tube are of equal length, and their moments of inertia equal.

The two pivots are precisely similar, and the interior of the axis turned to equal thicknesses at the two ends.

The level-arms bear upon the same part of the pivots which rests upon the Ys.

(E.) Piers, &c.—The piers are single stones, covering the circles entirely, and in close proximity to them.

They are closely clothed and cased, to protect against the influence of sudden meteorological changes. The same precautions have been taken with the collimator piers.

(F.) Subsidiary Apparatus.—The arms of the reversing carriage are much more widely separated than in previous instruments, the counterpoises are otherwise adjusted, and the arrangements of the rails entirely different.

A turn-table allows the carriage to be rolled and placed out of the way.

A second and independent apparatus is arranged for testing the graduation absolutely, and this without rotating the circles.

The access to the eye pieces, for nadir observation, is quick, and without use of cumbrous staging.

The arrangements for reading the nadir are entirely and totally different, as is the construction of the collimating eye pieces.

The levels are differently arranged.

So much, at least, I may say without detracting in the least from the merits of the doubtless admirable circle, constructed by the same makers for the Ann Arbor Observatory. The comparison of different instruments, each excellent, is most desirable when scientific ends are to be attained by the examination; but, as a mere matter of boast, for one side or the other, it is essentially vulgar. The ill-judged vauntings of Dr. Armsby, at the time of the inauguration, over the superiority of dimensions of the Albany instrument,—vauntings which, as both he and Mr. Olcott well knew, I exerted myself to the utmost to suppress, seem to have had no inconsiderable share in bringing about, although indirectly, this very unwarranted and most exceptionable manifestation on the part of Dr. Brünnow. I will hope that the inaccuracy of his statement was the result of a want of information alone.

The observations with this instrument,—in addition to the labor of making them, and that of preparing for them,—necessarily entail an extended and laborious reduction; a work of which the extent is unsuspected by those not familiar with practical astronomy. I can give no better idea of it than by quoting the language of Mr. Johnson, the celebrated Director of the Radcliffe Observatory. In a report to the Trustees of his Observatory,—a corps of gentlemen affording a strange contrast to the majority of those of the Dudley Observatory, in that they seem to consider their connection with the institution as intended to advance of the interests of the Observatory rather than their own,—he speaks as follows:

"The kindly notices of approval, which from time to time have reached me, are my only encouragements to persevere in a routine, where the pleasure is alloyed with an amount of drudgery and monotony, of which no one who has not experienced it can have an idea.

"It may surprise you, perhaps, to hear so grave a description of an astronomer's duties; for it is not an uncommon impression that they con-

sist in sitting under a telescope, and making certain notes of what he sees. This, though doubtless a very necessary, forms but a very small portion of them.

"Very few observations, indeed, as they come from the telescope, are applicable to any useful purpose. To fit them for theoretical investigations, to render the observations made at one place comparable with those made at another, or even those made at the same place at different times; to fit them, I say, for these purposes, every observation must be cleared of two distinct classes of errors; one, depending on the positions of the instruments, always liable to minute changes; the other, resulting from actual or apparent changes in the heavens.

"The correction of these errors involve eight or nine distinct arithmetical processes of from ten to twenty figures each, a great part of which is performed in duplicate, besides a number of preliminary determinations, which are required before we can enter upon the calculations, so that the last two or three figures on the right of every line of our printed diary, are in fact the representatives of between two and three hundred. This operation (termed Reduction) has to be performed for every *single* observation; and the annual aggregate is generally between four and five thousand.

"A very eminent authority, (the present Astronomer Royal,) a few years ago estimated the time required for the complete reduction of an observation at not less than half an hour; whereas the observation itself is generally made in about five minutes. And you may conceive that the irksomeness of all this is not diminished by the fact that when once the preliminary mathematical discussion has been concluded, and the work set in order,—the calculations are so simple that they may be performed by a moderately educated school-boy, yet requiring at every step a degree of caution which would task the accuracy of an accountant.

8. *The Tabulating Engine.*

In the year 1822, Charles Babbage perfected in his mind the idea of a machine for calculating and printing tables by means of differences. In 1823, he undertook the construction of such a machine for the British Government. For about ten years the work went on under Mr. Babbage's supervision, about £17,000 being expended in payment of workmen, for the manufacture of tools, &c. Early in 1833, the construction of this engine was suspended and never resumed; and the uncompleted machine was placed in Somerset House, London, where it still remains. A year later, Mr. Babbage devised a new principle, applicable to complicated arithmetical operations of a much higher order; and since that period he has been employed upon the plans of the new and much more powerful machine, known as the Analytical Engine. No part of it has to my knowledge been as yet actually constructed.

The essential and paramount advantages of tables thus computed and stereotyped by machinery would be: 1st, the superior accuracy of the calculated results, inasmuch as any error occurring would be perpetuated and increased until it forced itself into notice; and the correctness of any one quantity would thus be a guaranty for that of all preceding ones; 2d, the entire absence of all typographical errors; 3d, the confinement of mental effort to its especial and appropriate functions, thus enabling one intellect to bring about results which would be far beyond its capacity if mechanical computation were allowed to exhaust mental energy.

Rapidity of operation and convenience in sundry minor points are advantages of a very subordinate character; although in no way incompatible with those already named.

In the Edinburgh Review, for July, 1834, was published an elaborate article upon the Difference Engine of Mr. Babbage. This article met the eye of Mr. George Scheutz, of Stockholm; and suggested to him the idea of constructing a machine for the same purpose. But since only the operations and results of the machine were described, and not its structure, Mr. Scheutz was thrown quite on his own resources. He invented various parts of an apparatus to fulfil the same purposes, and constructed models of these parts in wood, pasteboard and wire. In 1837, his son, Mr. Edward Scheutz, then a student in the Swedish Polytechnic school, undertook the construction of a working model in metal, and during the summer vacation made sufficient progress to prove the practicability of the scheme. In October, the elder Scheutz applied to the government for aid, to which a negative answer was returned in February following. The two continued to labor with head and hand at the model, and at last completed enough of the calculating portion to prove its feasibility, and to calculate series with one difference to five figures. By April, 1842, the model was extended so as to calculate similar series with three orders of differences. In another year the printing apparatus was devised and attached to the model; and at last, in September, 1843, the model was exhibited to the Swedish Academy of

Sciences, and a certificate obtained from the Academy as to its performance.

With this certificate the inventors sought in various countries to obtain an order for constructing the entire machine, but in vain. The model remained shut up in its case for seven years. In January, 1851, the elder Scheutz appealed anew to the Swedish Government for assistance, to enable him to construct the machine upon an extended plan. The request was referred to the Academy, which reported in favor of compliance, but the government subsequently decided in the negative.

The Diet of 1851 voted that a national recompense of 5000 rixdollars be awarded the inventors, on condition that the King should find, upon examination, that the machine performed what was claimed for it. But the inventors, having no means to construct the engine, succeeded in obtaining the reward in advance, by procuring a guaranty for repayment in case of failure. This guaranty was afforded by the liberality and public spirit of fifteen members of the Academy of Sciences who pledged themselves to refund the amount if the machine should not be completed by the end of 1853 and found to answer the desired ends. Before the close of October, 1853, the machine was completed. The satisfaction of the King and of the Academy was so great that an additional reward of the same amount as before was voted to the inventors, of which they received notice in August, 1854.

Before the close of that year, it was taken to London, where it attracted the admiration of some of the most eminent scientists; and during the following summer was exhibited in the great Industrial Exposition at Paris.

Mr. Babbage had meanwhile interested himself greatly in behalf of the new engine and of its inventors. From the beginning he adopted it as a foster-child of his own, and with word and deed aided the Messrs. Scheutz in their endeavor to bring it to public notice. He remained for a long time in Paris, to explain it to scientific men; he brought it to the attention of the Institute of France, as well as of the Royal Society of London; and published several pamphlets concerning it.

The problem of computing and printing by machinery had long interested me. In 1845, Mr. Babbage had explained to me the construction of the unfinished Difference Engine; and many hours had been passed in discussing with him the probable future applications of the principle. The same had been the case in 1851; and when I met him in Paris, in 1855, on my expedition in behalf of the Heliometer and Meridian-circle, it was with no small delight, that I heard of and saw the calculating engine of the Messrs. Scheutz; and I resolved anew, as often before, that, should it ever be within my power to contribute to the introduction of the system into actual use, no efforts should be wanting.

After my return home, I described the apparatus to Messrs. Armsby and Olcott, and stated my conviction of its future usefulness. But I did not ask for its purchase. Not that I hesitated at the responsibility, for I would gladly have taken it, but I acted in the consistent pursuance of the one principle which had guided me from the beginning,—not to interfere in financial matters, or to add to the immense responsibilities which the preparation and adoption of the plans for the Observatory and the necessary instruments entailed upon me. I lost however, no opportunity of enlisting the interest of Dr. Armsby, by giving him descriptions and showing him drawings of the machine, in the hope that he and Mr. Olcott might, relying on my judgement, see their way clear financially to propose the purchase of the engine. They did so, and the machine was bought with the donation of Mr. John F. Rathbone. It will be borne in mind that funds were at this time fast flowing into the treasury, and that the purchase of this engine apparently implied no sacrifice of any important object.

As already avowed, the recommendation of the instrument came from me. I hoped for the purchase, and rejoiced at it. Were it to be destroyed to-morrow, it would have accomplished a work, and in my judgement, have inaugurated an epoch. It has proved the feasibility of practically supplying the place of the toiling brain by mere muscular force, in all that part of computation which is not intrinsically the work of thought. And

to the Dudley Observatory, and to the United States, belongs a part of the honor. Yet in their desire to injure me, and make me appear a participant in the profuse expenditures of the past two years, the majority of the Trustees assert that I "urged the purchase;" "proposed that Mr. Rathbone's previously subscribed $5000, should be appropriated to this purchase,"—allude to it as "an expenditure so obviously injudicious;" sneer at it in á váriety of ways; speak of its results as "a column of printed figures;" and falsely assert that they "were charged two hundred dollars for bringing it into use." They have never paid one dollar for this purpose—though twice two hundred dollars would have been well bestowed. They voted an appropriation, but not one-tenth of it was expended by me; and none of it was paid by them. These detailed statements will be refuted also in detail, in the subsequent part of this Reply, §34.

Among the earliest steps after taking charge of the Observatory were the studying out of this engine and its preparation for practical work. No description of it has to my knowledge ever been published; and none accompanied it to this country. The only explanation afforded consisted in a single sheet of lithographic outline-drawings of the several parts, and a letter of Dr. Edward Scheutz, giving instructions for changing its adaptation from the decimal to the sexagesimal system and the reverse, with the simple rules for setting it.

The dirt, which had accumulated on the passage, and thickened oil, impeded its action greatly, and after engaging the services (not at Observatory or Coast Survey expense however,) of a mechanical assistant, I went with him through the whole machine, until we had rendered ourselves familiar with all its parts, supplying such little improvements as native skill or suggestions might prompt; and after an extended series of experiments, to determine various points important in a practical and economical point of view, put the machine in action. The strictly algebraical problems for feeding the machine made quite as heavy demands upon time, and thought, and perseverance, as did the problem of regulating its mechanical action;

but all was soon in operation, and by the aid of my zealous and enthusiastic assistants, Messrs. Batchelder and Searle, the True Anomaly of Mars was computed and stereotyped for intervals of a tenth of a day throughout the cycle; and a sufficient number of the plates electrotyped, to enable me to be confident that all difficulties were surmounted. Since that time the Eccentric Anomaly of Mars, and the logarithm of its Radius-vector have been computed and stereotyped by the machine in like manner, for the same interval, making a series of tables upon which the reputation of the engine may well be rested.

9. *The Transit-Instrument.*

The full explanations relative to this instrument, which were given by the Scientific Council in the "Defence," seemed at the time to render all attempts at farther mystification or misrepresentation on the part of Mr. Olcott and his co-workers futile and hopeless. But in pursuance of their established and consistently followed policy of maintaining falsehood by the potent force of mere repetition, and of trusting to the enormity and unblushing assurance of their misstatements as a sufficient protection against disproof, the very simple matter of the Transit instrument has been again made to furnish the material for a part of this Second Attack.

Prof. Bache, in his capacity of Superintendent of the U. S. Coast Survey, promised in 1855, both orally and in a letter to Mr. Olcott, that if the Dudley Observatory would provide a Heliometer with which measurements of the Pleiades might be made, adapted to the needs of the longitude computers in the Coast Survey, he would furnish an observer, and would in addition provide a transit for time "*from among the Coast Survey instruments.*" Although the Heliometer is not yet ready, and the fulfilment of this promise, therefore, not yet required, yet one of the very best Coast Survey transit instruments then on hand was provided by the Superintendent during the year 1856, and has since that time remained at the Observatory, with the exception of a short time during which it was undergoing some mechanical modifications at the workshop in Washington City,

to adapt it for more convenient use in the telegraphic longitude-measurements. In addition to this, Prof. Bache empowered me on my last visit to Europe to order a Transit instrument of much larger dimensions than any previously belonging to the Coast Survey. His intention was to have this instrument, also, set up at the Dudley Observatory, when the pledges of Mr. Olcott should have been fulfilled, and the attainment of the requisite endowment should thus permit an observer to be assigned to the instrument. That period has never arrived; no purpose for which the large and expensive Transit instrument could be employed at the Observatory, under the circumstances, would be fulfilled by this instrument better than by the much smaller and more easily managed one already in employment; the large one is of course proportionally cumbrous in use; it would be greatly exposed to chances of injury, not only from meddlesome hands, but from the atmosphere; and the only condition which would in my judgement warrant its unpacking and erection,—viz.: that of one observer, at least, who could devote his whole time to making and computing the observations with it,—did not exist. These are some of the considerations which guided me, and I know of no argument of weight on the opposite side. It is not creditable to an astronomer, in my opinion, to have his instruments needlessly exposed to injury; nor for the sake of a vain display of glittering brass and lacquered metal, to suffer them to lie idle in their bearings. At any rate, it would be in violation of my own taste. The Meridian-circle and Calculating engine promised to call all the available time of myself and my assistants into requisition; and it would have been the height of folly for one already so fearfully overburdened to add new responsibilities to his load, when uncompensated by any corresponding advantage, or indeed by any other advantage than the vulgar satisfaction of tinsel parade and vainglorious ostentation.

It should be added in farther explanation, that a Transit instrument forms an essential part of the more complicated apparatus known as a "Meridian Circle," and that the former

is capable of no use, or mode of observation, to which the other is not also applicable. The large Transit, of which we are speaking, is moreover much smaller than the Meridian Circle of the Observatory;—the object glass of the one having an aperture of seventy-two lines, with a focal length of eight feet; while that of the other has an aperture of ninety lines, and a focal length of ten feet. Nothing, therefore, can be done with this instrument, which cannot also be done (and better if the size of the instrument comes into consideration) by the Meridian circle. The original structure of the edifice contemplated the simultaneous employment of two meridian instruments; and this large Transit-instrument was provided by Professor Bache, in expectation that the desired endowment-fund would be obtained, and thus allow both instruments to be kept in use. To mount, adjust and adequately employ the Circle, was more than my means readily permitted. How ill-judged any unpacking and mounting of the Transit would have been, will be readily understood.

This instrument is, in its internal arrangement, precisely similar to the Transit portion of the Meridian Circle. The absence of the graduated circles from the axis has, however, permitted the attainment of sundry conveniences in the former, which were impossible in the latter; among which are especially to be mentioned, the arrangement of the counterpoises and the power of reversal without removing from between the piers.

That the Superintendent would have afforded the necessary permission to unpack and mount the instrument, had I applied for it, is most probable, since he had given the same under certain conditions, six months previous; but I did not now ask for such permission. The "Executive Committee," in March last, appropriated $150 for mounting it, in reply to my application for $50 for the smaller one, (which application was not granted). This vote was evidently intended to form a source of annoyance, and was a direct interference with my exclusive function under the compact,—that of managing and conducting the scientific work of the Observatory. Although official authority had been given me in December, 1857, I certainly

should not have presumed to meddle with the instrument under the changed circumstances, without renewed instructions or authority.

Such is the simple detail of the whole affair. The boxes containing the large Transit instrument are still stored at the Observatory, having been opened only on their first arrival from Germany, to ascertain that the parts were in good condition, and to protect the pivots, &c., from injury.

In face of all these facts, the accusers have the shameless effrontery to say, (p. 133:)

"The 'pledge' of Prof. Bache was to supply a Transit instrument for time, at a cost of $1,500, to be mounted and used in the Dudley Observatory. This instrument was purchased in Europe by Dr. Gould, in redemption of this 'pledge.'"

The small Transit was permanently set up in April. With it, and with its twin, which was mounted at the New York station, all the longitude observations have been made. It has been in use on every clear night since then; it affords the standard time to the Observatory with all the precision with which this would have been obtained by the employment of the large instrument; and it has been much *more* available for the longitude work than the other would have been. Indeed, had the large instrument been mounted and adjusted I should still have been inclined to employ the small one for the longitude work. It is for the removal of both these instruments from the Observatory premises that Mr. Olcott has applied to the Secretary of the Treasury of the United States. Thus, after groundlessly charging Professor Bache with a breach of faith in not furnishing and mounting the instrument stipulated, he has actually endeavored to effect the removal of both.

10. *The Longitude.*

When the Observatory was placed under my charge by the compact ratified in Jan. 1858, it was unequipped, unfurnished and almost inaccessible. The Trustees had officially promised the means necessary for furnishing the indispensable equipments and for mounting the instruments, and Mr. Olcott, whose will had been law since the foundation of the institution,

had promised Professor Bache and myself, that if we would provide for the performance of the work for which the appropriation of $2000 was voted by the State, (viz: determining the meridian of the Observatory,) any surplus remaining after the performance of the work should be available for the current expenses. This appropriation, Mr. Olcott had before assured us, might be applied to paying the salary of an assistant for three years, provided this assistant should be his nominee; or might be obtained even by a nominal determination of the position.

When I took possession on the 20th of February, instead of two assistants I was accompanied by four, all eager to aid in the effort to make the Observatory a means of advancing science in America, and of contributing to the honor of the American name. All of them had their regular duties to perform in the Coast Survey service, but were filled with zeal and enthusiasm to contribute their share towards the advancement and the honor of the Observatory. They have labored with success for the rightful attainment of an honorable name.

The time was not then far distant, (it has now arrived) when the longitude of some point in this vicinity would be indispensably needed by the Coast Survey in connection with the triangulation of the Hudson, made by request of the New York Harbor Commissioners, under an arrangement with the President of the United States. It was also needed by the State under the law of 1857. Two separate determinations would have involved double expense, while the sharing of the expense of a single one between the U. S. Government and the State, would be an arrangement mutually advantageous. Professor Bache, while he did not feel authorized to subject the government to outlay for the purpose of determining the longitude before this was needed for official purposes, had no hesitation in offering the gratuitous services of the salaried members of the longitude party of the survey, both for making and computing the observations, as well as the gratuitous use of all the apparatus and instruments needed.

He therefore offered to the Regents of the University and to the Trustees of the Observatory such aid as could be afforded

by the instruments needed for use in these operations, by the services of the officers of the longitude party, and by those of the computers attached to the same party,—the Observatory to pay the outlays required, for mounting the instruments, erecting a station, wages of hands, batteries and incidental expenses; the whole amounting, according to the estimate made by Professor Bache and myself, to about $600. The only proviso in this offer was that the government should be subjected to no farther outlay.

Thus,—while the salaries of the assistants, the use of the instruments and apparatus, the labor of regular computers, &c., which constitute the chief sources of expense, their total amounting in fact to a sum quite equal to the whole amount of the legislative appropriation, could be provided by the Survey without subjecting the United States government to any additional outlay,—the Trustees by paying the comparatively small actual outlays requisite, would receive the very much larger amount from the State.

It is proper to remark in this connection, that my duties in the Coast Survey consist exclusively in the superintendence of these longitude determinations, and that my assistants at the Observatory and elsewhere, are engaged in this work; so that the whole labor assumed by the Coast Survey would fall as an additional burden upon our shoulders; a burden cheerfully assumed, and willingly borne, despite the taunts and sneers which have been our portion from those in whose behalf we toiled. For be it understood that, notwithstanding Mr. Olcott's promise, not a dollar of the balance of the longitude appropriation has come to my hands for the current expenses of the Observatory. The outlays were somewhat more than $900, instead of $600 as anticipated. But only these $600 have been received or asked for; and, while we have been gratuitously laboring, not only to earn the balance for the Trustees, but to carry on all the work of the institution, the whole of the current expenses have been at my own private charge. If the whole appropriation has not been received by the Trustees, it undoubtedly might have been, with proper efforts.

The exchanges of telegraphic signals between Albany and New York extended over somewhat more than a month, the work occupying most of the time of two assistants, two aids and two laborers during that period. Subsidiary observations have been carried on since that time, and a computer busily employed in reducing the observations.

11. *The Heliometer.*

The "pledge." of Prof. Bache, in 1855, so often referred to, was contingent upon the acquirement of a Heliometer, as recommended; since none exists in this country, and the problem which he desired to have investigated required its use.

The instrument is distinguished from an equatorial refracting telescope by the peculiarity that the object-glass is cut in halves; so that each half may give an independent image of the same object. These images are superposed and coincide when the two achromatic semi-lenses are in such a position that the two form one object-glass of one complete lens; but by sliding either half to one side, the two images are of course separated.

By so changing the relative position of the half-lenses, that the image of one object, seen through one half, shall coincide with the image of another object, as seen through the other half, the observer determines the angular distance between the two objects, by measuring the relative displacement of the parts of his object-glass.

The heliometer possesses many great advantages over any ordinary micrometer, among which is its capability of measuring angles many times larger; and its adaptation to the measurement of the sun's diameter, (which is not contained within the field of an ordinary telescope, and cannot therefore be measured by common micrometers,) gave to the instrument its name of Heliometer.

The magnificent instrument constructed by the Brothers Repsold, of Hamburg, for the Radcliffe observatory at Oxford, contained so great a number of improvements over its predecessors, that the question was seriously agitated whether some new name should not be given to it, to mark its great diversity from the heliometers previously constructed. To examine and

study this instrument thoroughly, formed an important part of my mission to Europe in 1855, and was the chief motive of Mr. Spencer's voyage in the following spring. To the kindness, genial hospitality, and ready aid and suggestions of Mr. Johnson, both of us were deeply indebted for new and important ideas, which his ripe experience suggested for our guidance in the construction of another instrument.

In awarding the construction of the Dudley Heliometer to Mr. Spencer, it was made a condition by the Executive Committee that the plans should be satisfactory to me. And although I soon learned to repose the highest confidence in Mr. Spencer's mastery of dioptrics and of the theory of instruments, the responsibility, thus thrown upon me personally, rendered it necessary that I should thoroughly examine and study the various modifications which he from time to time suggested. The amount of study, thought and care, entailed by this duty, can be fully appreciated only by a practical astronomer.

Mr. Spencer first made the startling proposition to dispense entirely with the divided object-glass, and fulfil its office by a divided concave achromatic lens, placed near the eye-end of the tube. Many serious disadvantages would thus be obviated; and after full discussion and careful study I became convinced that such a change would be a decided advance, and indeed a brilliant improvement. Among its advantages would be the very great ones, of being able to employ a much larger object-glass with no greater expense, and of obviating some of the most serious disadvantages of the Radcliffe instrument,—especially those connected with the measurement of angles of position, and with the flexure caused by a great weight at the object-end of the tube. It would be out of place to enter here upon any technical discussion, but I may say that I became convinced that the proposed modification would be a forward step as great as that of the Repsolds in devising and constructing the Radcliffe heliometer. Of course my assent was joyfully given.

As the plans shaped themselves, Mr. Spencer suggested continually new changes, which formed the subject of careful study

and discussion, but finally a grand idea, eclipsing all previous ones, was elaborated and proposed by him, and received my full indorsement, after long and careful study. He now proposes *entirely to dispense with any division of a lens*, and to attain the desired end by the employment of two prisms.

The instrument in this perfected form becomes more than a heliometer. It is an instrument of far superior power and scope; adapted especially to those purposes for which the heliometer was devised, but attaining them without the sacrifice of other desirable ends which are necessarily surrendered in the heliometer. It is an instrument upon which the gifted inventor may be well content to rest his reputation; and in which I feel that it is allowable for me to have some pride, even for the very subordinate part which I have had in bringing about its design.

A prominent object of my expedition to Europe in September, 1855, was to give the order and make the arrangements for a heliometer from the Brothers Repsold. But, on consulting these eminent artists, I found that I had under-estimated both the probable cost and the probable time; and therefore, after full discussion with them both of the principles which I desired to have incorporated, and of those which they recommended, I left the definite order suspended until I could report the facts to Messrs. Olcott and Armsby, and obtain farther instructions.

The circumstances under which the order was finally given to Mr. Spencer will be fully detailed in § 28 of Part Second.

Such is a brief summary of the facts regarding the Heliometer,—a matter which, like everything else of prominence in the history of the Observatory, is now made a means of attacking me and of holding me up to censure for alleged misdeeds. For its non-completion I am held up to odium; and it is seldom, if ever, mentioned in the "Statement of the Trustees" without being coupled with some fling, or sneer, or censure, directly or indirectly aimed at me. The letter of Mr. Spencer, given in the Appendix, contains answers to some interrogatories which I had addressed to him, upon this among other subjects.

12. *Clocks and Time Signals.*

Two kinds of time are employed in Observatories; the one is that in which celestial observations are almost exclusively made, and which is regulated by the transits of the fixed stars; the other, that which is in use in the ordinary pursuits of life, and is dependent upon the sun. The former is called sidereal time, and with this an astronomer has chiefly to deal; the latter is called mean or civil time, and is the only kind known to the great mass of men. Of the former, there are 366¼ days in a year; of the latter, there are 365¼. The exact determination of the absolute time, at which a given phenomenon occurs, forms the only subject of many astronomical observations, and is an essential part of almost all; and every astronomical observer needs a sidereal time-piece close at hand. My plan in the arrangement of the Dudley Observatory comprised the following apparatus:

1. A system of dials, one in each observing room, not merely regulated, but absolutely driven, by means of telegraphic connection with one central sidereal clock, which was to be imbedded in the base of the great central pier, and thus removed as far as possible from the influence of atmospheric changes. This "Normal clock," as it is called, was ordered at Altona during my visit to Europe in 1855. The dials have long since been completed, but the Observatory possesses as yet but one astronomical instrument, for which a dial is needed. And a sidereal clock presented by the Messrs. Blunt of New York affords all requisite facilities, in the stead of the expected one from Altona.

2. A similar system of dials for connection with the clock which indicates mean time. This latter clock, described by me at the inauguration of the Observatory, consists of an apparatus by which a galvanic battery (also of peculiar construction) sustains the oscillations of a compensated pendulum,—this pendulum, by means of the same battery, governing another series of dials, which, however, do not require by any means the delicacy needed for the sidereal ones used for making observations. One of the dials of the mean-time clock was specially

ordered and constructed previous to the Inauguration, at the request of Messrs. Olcott and Armsby. It differs from the rest in having for its face a large and handsomely cut slab of marble three feet square, and forms a prominent object to one entering the Observatory building. On the left hand of the entrance, precisely opposite, is the pendulum which governs it.

3. For recording the beats of the clocks and the moment of an observation, made by the telegraphic or American method, an apparatus called a Chronograph is employed. One of these chronographs will be required for each observing room. At present, of course, only one is needed; namely, for the Meridian circle. This was completed and placed in the Observatory in the middle of August, 1856, although my Accusers state the reverse. So far from being an entire failure, as alleged by them, it is a superior and successful instrument. It did not cost $750, as asserted by the same authority, but $252.

4. Apparatus for telegraphing time to railroad stations or distant places. This consists of two parts, the signal-givers and the signal-receivers. The Astronomer Royal of England has been especially successful in arranging and employing apparatus of this character; and through his kindness and attention I obtained many valuable and important ideas which have guided me in the construction of the apparatus for the Dudley Observatory. This apparatus is, however, essentially different in its nature and arrangement from that employed at Greenwich. Through the skill of Messrs. Farmer and Polsey, the ideas furnished by me "in the rough," so to speak, were elaborated and executed with elegance and success. The orders were given early in 1856, and the progress of the construction frequently inspected by me. The work was almost finished when the commercial embarrassments, in the autumn of 1857, caused a temporary suspension of it by the maker. This was, however, resumed, and the apparatus completed at once, so soon as measures were taken in February last to put the Observatory into operation.

In the First Attack of Mr. Olcott, I am violently assaulted because these clocks were ordered at all, since, as he expressed

it, they were "useless, only as toys for the entertainment of my juvenile companions and of visiters." In the Second Attack, I am censured because they were not completed at a still earlier date! The order for them was given at the express request of Messrs. Olcott and Armsby, for the sake of perfecting my plans for furnishing time-signals. The undertaking cost me much trouble, thought and unease, and was executed with all the promptness which I could secure.

Such is the apparatus for keeping the two kinds of time, for recording the time, and for transmitting time-signals. The total expense of the whole, including two journeys of the makers to Albany and back, and all the incidental outlays, has been as follows, as nearly as I can ascertain, my error in the total probably, I think certainly, not exceeding two or three dollars.

Corning clock, pendulum and dial,	$189 14
Small dial, used at the inauguration,	32 00
Chronograph,	252 00
Three sympathetic dials for mean time,	150 00
Three observing dials for sidereal time,	323 75
Signal-giving apparatus,	50 00
Two large clocks for regulation by telegraph signals,	152 50
All other expenses,	162 03
Total,	$1,311 42

Under the latter head are included the battery, magnets, insulated wire, expenses of line to the city of Albany, of putting up the apparatus, freight, expressage, traveling expenses of makers, &c., &c., more than two-thirds of these having been incurred previous to the Inauguration in August, 1856. About half the total amount for time-apparatus was advanced by me personally to the makers, in default of payment by the Trustees, when due.

Yet in this respect, also, I am accused of "wasteful extravagance!" These clocks, chronograph, &c., form one of the few cases in which the outlays were subject to my control and incurred upon my responsibility.

I was informed by Dr. Armsby, at an early period of my connection with the Observatory, that the Hon. Erastus Corning had subscribed $1000 towards providing it with time. Not,—Dr. Armsby said,—for *a clock* alone, but "for providing the Observatory with time." In acknowledgement of this liberality, I suggested to Dr. Armsby, very early in 1856, that the great marble dial and its pendulum might advantageously be known by the name of the Corning clock, since from this clock would proceed all the time-signals which were to be transmitted to distant places; and this Dial was itself a conspicuous object in the Observatory. He was much pleased with the idea; and from that date the large marble dial, showing mean time, has been known as the "Corning clock." In July or August, 1856, previous to the Inauguration, Dr. Armsby had a marble tablet, bearing the name of the donor, engraved and placed beneath this large dial. At the inauguration, a wire two miles long was laid by Mr. Gavit from the Observatory, (where it was connected with the Corning clock,) to the large tent in which the addresses were delivered, and in which one of the dials was brought into the circuit, so that the time was telegraphed in the regular way from the Corning clock to the dial in the tent.

Yet the Accusers, quoting the language in which I referred to it at the time, now charge me with deliberate falsehood in the presence of that mighty audience. They first assert that "the Corning clock" had not arrived *from Europe*, falsely implying that the Normal clock was known by that name, and then say (p. 27):

"That the deception might be the more complete, the speaker, when he alluded to the "Corning Clock," turned significantly to a clock exhibited by Mr. Gavit, upon the rear of the platform."

Thus they charge me with practising a gross fraud upon the audience—by pointing to an ordinary clock, held up for the purpose of aiding in the deception, while the clock with which this was declared to be in telegraphic connection, if in existence, or even begun, was three thousand miles off, instead of being at the Observatory.

And let it be remembered, that all the proofs of their confidence and regard, all the reliance upon my supposed truthfulness and probity, which these men confess to having exhibited for more than a year afterwards, were manifested in spite of their knowledge of the enormous fraud which they declare I thus publicly perpetrated!

The proposition to furnish time-signals to the New York Central Railroad, and to the city of New York, were distinct offers of the Trustees, the letters being prepared by me, in January, 1856, at the request of Messrs. Olcott and Armsby, and signed also by Professor Bache and myself in behalf of the Scientific Council. Our signatures were appended in guaranty of the feasibility of the plans, and Professor Bache appeared before the Board of Directors of the Railroad to advocate the proposals; but they have never been definitely accepted. The offer to New York City was to give regular time-signals *gratuitously*, provided the city would furnish the requisite apparatus. The proposition was transmitted to the Common Council by the Mayor, with a message strongly recommending its acceptance, and was referred to a committee, which never reported. The offer to the New York Central Railroad was also referred by the directors to a committee, of which Mr. J. V. L. Pruyn was chairman. Just previous to his departure for Europe, soon after, on business of the road, he authorized me to have two signal-receiving clocks constructed for testing the plan, and from that time I heard nothing farther from the directors on the subject. Still, by the wish of Mr. Olcott, I went on and took the necessary steps for the construction of a signal-giver and two signal-receivers, which were perfected and constructed. The care and trouble which they cost, both myself, and the makers, can only be appreciated by those acquainted with the details of such apparatus. My own labors were cheerfully contributed, though at a period when I was heavily weighed down with other and onerous duties; the makers presented no account, direct or indirect, for the many experiments and trials necessarily entailed, but deemed the honor of success a sufficient recompense. It may be seen what has been our reward.

It would be incredible, that a misstatement so enormous as that of the Accusers, on page 34 of their "Statement," could be made, did it come from any other men, claiming to be reputable. The laying of a wire to New York city, since the exclusive use of existing wires for the requisite time could not be obtained, was the chief obstacle to the enterprise when the original offer was made. More than three-quarters of the estimated expense to the city, in case the offer should be accepted, consisted in the cost of this wire. Overtures were made to the telegraph company *in January*, 1856, relative to the terms upon which they would permit their posts to be used; and were made, moreover, at the instance of Mr. Olcott. Yet he now asserts, that when on the last day of the year 1856, I spoke of this wire in a letter to him, "it was to the Trustees a startling proposition. It created great surprise," &c., &c. And to make it an occasion of suspicion to the public also, the Accusers dexterously change one word, converting "a new telegraph wire" into "*a new telegraph line*," in order to convey the idea that, in the exercise of my accustomed extravagance, I recommended the building of a line of telegraph from Albany to New York, at the expense of the Observatory. It does not require any large amount of telegraphic knowledge to perceive the difference between "a telegraph wire" and "a telegraph line." But they change the word so quietly, that they think the deception will pass unnoticed. Besides, it was to be at the cost of the city, if the proposition was accepted, and not of the Observatory at all!

Abundant evidence,—and evidence, too, which Mr. Olcott will hardly venture to dispute,—can be presented to show that he distinctly understood and approved the idea of this telegraph wire when the time-signal plan was first broached, early in January, 1856; and that it created no surprise whatever, when the subject was renewed, a year later. An independent wire had been originally insisted upon *by Mr. Olcott himself*, upon my first explanation of the serious difficulties which would be encountered in using the wires of the telegraph company.

This man and his coadjutors in the effort to break down my character, now set up (p. 12) the barefaced pretence, that a *performance* on *my part* of what they call *my engagement*, would have secured to the Institution an income of $1,500; that I "confidently promised that time should be transmitted regularly to New York city, and to all the railroads, on and after the 28th day of" August, 1856, (p. 34) and that the mounting of the instruments would "have brought into the treasury of the Observatory a very respectable and gratifying income," (p. 45).

These deliberate and wilfully malicious misstatements, gross and astounding as they must appear to every honest man, are but the type of those which characterize this production of Mr. Olcott and his co-laborers in the work, certified to as it is, from beginning to end, by the other signers.

13. *The Catalogue.*

A Catalogue of stars, down to the sixth magnitude inclusive, was long since marked out as the work by which the Meridian-circle might first be made capable of rendering the most service to astronomy. In the absence of any equatorially mounted instrument, by which regular series of observations upon asteroids, comets or double stars, might be advantageously made,—the whole energies of the institution ought, in my judgement, to be devoted to some undertaking of that less popular, but certainly quite as important class, for which the employment of a meridian instrument is essential. And all considerations seemed to point to this Catalogue as the work at once most appropriate and most desirable.

It may be well to premise that the purpose of the Meridian circle is simply to measure positions of celestial bodies; that, as its name implies, the observation is made at the time when the body is crossing the meridian, and therefore within a very limited period of time,—rarely amounting to so much as thirty seconds before and after the instant of transit. And it will be evident, therefore, that before making the desired observation, it is requisite that the place of the object to be observed should be approximately known, in order that the telescope may be

pointed beforehand to the right position for seeing it as soon as it enters the field of view, and that the astronomer may be upon the watch at the right moment.

Consequently the first step toward the preparation of the catalogue is the construction of a list of the approximate positions of those stars which are to be observed, and of whose accurate places and magnitudes the catalogue will consist. This is called a "Working List," and its preparation must necessarily precede all other parts of the work. To prepare it, two things are necessary: first, the selection of the stars; and secondly, the compilation and reduction of the best determinations of those places which are at hand. This work has been completed by my indefatigable and faithful assistants, since we took charge of the Observatory; and not only completed, but independently performed in every part by two different persons. They have devoted their nights to a careful scrutiny of the heavens, numbering, mapping down and repeatedly determining the magnitude of every star within or near the limits of visibility to the naked eye in a cloudless and moonless sky, in order to decide which ought to be incorporated into, and which excluded from, the catalogue. And after the selection of the stars was made, and those which are to compose the new catalogue were decided on, the various existing catalogues have been laboriously searched for past determinations, and these determinations referred to the adopted equinox. This labor of computation, like the previously mentioned work of observation, has all been performed in duplicate. Observations of the magnitudes of these stars have been constantly going on through every favorable night; the total number of observations of this kind amounting, already (Nov. 19) to more than 4000. Most of these photometric observations of magnitude are made with the naked eye, assisted in the case of stars beyond the fifth magnitude, by common opera glasses. The results thus attained are extremely satisfactory; and though Mr. Olcott and some of the majority of the Board have sneered at and taunted us, both publicly and privately, because we undertook to make astronomical observations with opera

glasses, I am far from being ashamed of the fact. No astronomical instrument belonged to the Observatory excepting the meridian-circle and a little portable telescope three feet long, known as the "comet seeker." The preparations for using the former went on unremittingly, as has been already shown; the latter has been in constant use, as will hereafter be mentioned; and we have done what we could for astronomy, with the small transit, and with such other suitable appliances as were at our disposal.

It will not be forgotten that all this labor has been gratuitously performed in the intervals of those official duties upon which our subsistence depends.

14. *Other Observatory Work.*

The grounds about the Observatory presented in the early spring a desolate and repulsive appearance. Large tracts were destitute of grass, and offered to the view only a series of heaps of offensive rubbish; no road of any kind was laid out within the inclosure; the dwelling house was inaccessible for carriages, and almost so for pedestrians; there was no water and no means of obtaining it, except by bringing it up the steep hill from a distance. The inclosure, which was one only in name, was a favorite haunt of stray cattle, and, on Sundays and holidays, a rendezvous of idlers and of low characters.

I have laid out the grounds; caused the naked earth to be sodded; a road to be constructed; have planted trees and shrubs—a great part of those generously given by Mr. Davidson (one of the minority Trustees), having died from not having been properly set out; caused a well to be dug; drains and water courses to be laid; paths to be made; and numerous deficiencies in the house to be remedied. Of all this, the expense of obtaining water from a well was refunded to me by the Trustees;—nothing else. They also completed an unfinished sewer leading from the premises. From my private means, I have provided the requisite furniture for the house and Observatory; the casing for the piers; many necessary books; all the expenses of maintenance, such as fuel, stationery, messenger, &c. The debt for casing the piers, although

contracted in conformity with a vote of the Executive Committee, this committee subsequently "felt at liberty to repudiate." The salary of a superintendent of the establishment; and since May, that of a special assistant to accompany visiters, have also been paid by me. The materials for making gas were for a long time provided by the generosity of my friends, Messrs. Hawley and Aubin, the liberal donors of the entire apparatus by which the gas is manufactured on the premises. So far as not provided by them, the expense of materials and manufacture has also been defrayed by me.

In addition to these things, I have superintended the building of fences, the laying of a plank walk up the hill, the excavations of large pieces of hill-side to complete the inclosure, &c., &c.

So much for work not of a scientific character, but for the most part necessary in order that the astronomical investigations might be properly and conveniently prosecuted.

In addition to the scientific work already alluded to, a regular series of observations of variable stars have been carried on; this work like the photometric estimates for the Catalogue, being one especially adapted for prosecution before the Meridian-circle was available. The comet-seeker has been actively in use, and has already been the means of adding one to the number of known planets.

Up to the time just mentioned, (Nov. 19), there have been made by Messrs. Toomer, Winslow and Tilton, about 3000 determinations of magnitude for the stars of the catalogue, and by Messrs. Toomer, Winslow and Searle, about 800 observations of variable stars, and 300 of stars suspected to be variable, or used for comparison. Moreover, a very large number of star-transits have been observed for time, &c., by Mr. Tilton, in addition to the long series which go to make up the longitude campaign; and besides these, every occultation which has been visible with the comet-seeker, has been observed, chiefly by Mr. Searle. The constants of terrestial magnetism were carefully determined by Mr. Dean, while the longitude operations were in progress. This enumeration does not include the constant and laborious testing of clocks and chronometers,

nor any of my own work; nor that done to or with the meridian circle, which has of course consumed much time and labor.

I am disposed to consider this a very respectable array of work for volunteer laborers, contending against numberless and serious difficulties; followed, step by step, by persecutions and annoyances of every kind, which the pertinacious cunning of Dr. Armsby could suggest, or the bitter malignity of Mr. Olcott bring about; and laden meanwhile, with an amount of other and independent duties which might well task the powers and patience of stronger men.

15. *Side Issues.*

There are a number of false accusations, directly or indirectly made by the Accusers, which, though not bearing at all upon their main charges of incompetency, disrespect, peculation, neglectfulness, &c., are yet designed to throw odium upon me as a person of offensive manners and unworthy personal character. And there are a number of analogous attacks upon Prof. Bache, as being that other member of the Scientific Council, who had, from his position, been able to do the most in behalf of the Observatory, and who must therefore now receive the severest castigation from Mr. Olcott for his "want of Harmony." It is true that the attacks upon him in the "Statement of the Trustees" are not comparable in bitterness and vindictiveness with those which Mr. Olcott has since instigated in other quarters against Prof. Bache in connection with the Coast Survey, with which his reputation is so largely identified.

To such assaults as these I propose making such special replies as they may seem to demand in the Detailed Refutation. In this place I pass them by with very few remarks.

The attempt, on page 17, to excite the dislike of those who may not have received special invitations to the Inauguration of the Observatory, is sufficiently defeated by making known the following facts: 1st, that if any such invitations were issued in this country it was without my participation or knowledge;—2d, that the letters from which the alleged quotations are made, did not refer to invitations to the Inauguration at all, but to

certain invitations to attend the meeting of the American Association for the Advancement of Science, of which I happened to be General Secretary;—3d, that these invitations were to accept certain complimentary free passages, fourteen in number, presented through the generosity of the owners of the New York ocean steamship lines, and which the officers of the Association were in honor bound to offer only to gentlemen of high scientific eminence, the invitations being not only limited in number, but confined by the terms of the offer to European scientists; 4th, that the extracts as quoted are grossly mutilated and distorted, and that the passage requesting that certain persons be *not invited*,—is a passage fabricated and inserted by the authors of the pamphlet, for the sole purpose of exciting odium against me.

The attempts throughout the volume to sow discord between myself and gentlemen with whom I stand, as I hope always to do, in most agreeable personal relations, have been in most cases too easily understood to be productive of any harm. There are ten such cases in addition to the matter of invitations already cited. And finally, on page 163, the Accusers say:

"Those who have become familiar with the mental habitudes of Dr. Gould, are quite aware that it is very common for him to speak in terms of disparagement and depreciation, of the achievements of other scientific men. The Trustees, did they think it proper to resort to the weapons in their own hands, could easily show that American astronomers are entirely justifiable in withholding from him their friendship and co-operation."

How strange that they should have bestowed such marks of confidence and regard upon me, with these very "weapons in their own hands." The alleged "weapons" consist of certain personal allusions or remarks, in letters of a highly confidential character, written by me to Dr. Armsby. They were mostly published in the "Statement" of the Majority, and I have reason to believe that in those cases, or in most cases where the Accusers did not venture to print them, they have been sent by Dr. Armsby or Mr. Olcott to the persons concerned. In almost every case they were in reply to questions, or in response to remarks, from Dr. Armsby. They were of the same nature as the personal allusions which every man some-

times makes in conversation or correspondence of a confidential nature. My press-copies fortunately enable me to know just what I have said; and I have no hesitation in declaring that there is very little which I should not be willing to say again to my trusted friends. There is nothing in it all, from the alpha to the omega, which would in my belief affect the "friendship and co-operation" of American Astronomers. And in the cases of Dr. Brünnow, (who is not an American astronomer,) and of Prof. Mitchel, no want of "friendship or co-operation" had ever been suspected prior to the publication of Mr. Olcott's Manifésto at the close of June. In the case of the former gentleman the affair is not difficult of comprehension by me; in the case of the latter it must have been built upon some pre-arranged fabric of misrepresentation,—which my present knowledge of Dr. Armsby's peculiar gifts abundantly explains.

The scandalous distortions and contemptible innuendoes regarding the Astronomical Journal are easily disposed of by a statement of facts. One of the majority, Mr. R. H. Pruyn, having made himself very prominent in circulating misrepresentations on this subject during the past summer, a friend addressed me a note informing me of the fact, and making certain inquiries. My answer is given in the Detailed Refutation, (page 239) and will, I think, be considered as disposing of the subject.

The attacks upon Mrs. Dudley, upon Professor Bache, upon Messrs. Van Rensselaer, Corning, J. V. L. Pruyn, upon Mr. Morgan, the late Chief of Police, and upon the Committee appointed at the Citizens' Meeting, require no labored reply from me. Their "Want of Harmony" with Mr. Olcott explains it all.

CHAPTER VII.

SUMMARY.

The chief points to which it seemed important for me to direct attention have now been presented. For the sake of conciseness my assertions have not been accompanied by extended demonstrations. Previous to the publication of the attacks of the Trustees, I should have trusted that my word

would suffice. Under the present circumstances, it is proper, where the case admits of it, to submit proofs, and this will be done in the "Detailed Refutation" of the "Statement of the Trustees," which constitutes the Second Part of this Reply.

I have endeavored to call attention to the following facts:

1st. That the attempted expulsion of myself and assistants from the Observatory, in June last, was a bold violation of plighted faith, and of a formal contract; was unwarranted upon any ground, and was destitute even of a plausible pretext; that it could only be defended by the theory of some act of mine subsequent to the compact of December, 1857, and flagrant enough to justify a violation of that compact.

2d. That the charges, which form the burden of the "Statement of the Trustees," are based upon alleged occurrences, acts or discoveries *antecedent* to the vote by which they placed the Observatory in my hands.

3d. That the Scientific Council was elected in September, 1855; and, if not elected really with all the formalities, that any informality was entirely waived or cured by the recognition and acquiescence of the Trustees, and by the repeated public declarations of their accredited and acknowledged agents, that we were such Council; that our functions were not "merely advisory," nor intended to be such, but that we were deliberately clothed with full power over the scientific operations of the institution; that only the promises of such full power secured our acceptance of the office; that only its bestowal could have retained us in the position,—for we asked no emolument, no reimbursement of our constant expenses, no reward whatever, other than the opportunity to make the Dudley Observatory an astronomical institution, rather than a public exhibition; that an attempt was made in January, 1858, to declare our previous election informal, for the sake of introducing into its ratification, conditions and modifying phrases, by which the Managers might subsequently claim to reduce us from the Scientific Council of the Observatory, to the scientific counselors of the gentlemen who constitute the Board of Trustees.

4th. That a part of the "wasteful expenditures"—which it

is alleged (and truly, as I believe) have been incurred,—have been made not only without my concurrence, but without any participation whatever on my part, and against my opinions and remonstrances; that the responsibility for the rest of the "wasteful expenditures," (though incurred in relation to plans proposed or recommended by me,) belongs exclusively to the Trustees,—whose duty it was to know what plans could, and what could not, be executed within the means of the corporation, and to regulate and control all expenditures;—and not to me, who neither made the contracts, nor selected nor knew the parties employed, nor gave them directions, nor approved the bills.

5th. That,—although I did, for a short time, consent to undertake the superintendence and direction of the work performed in execution of the plans for the necessary alterations and constructions at the Observatory, so far as this was possible for a non-resident visiting the place only at considerable intervals of time,—yet my directions were systematically interfered with in my absence by Dr. Armsby, my plans thwarted, and my control, therefore, merely nominal,—all attempts to maintain it being soon abandoned; and even while my nominal control lasted, my instructions were necessarily general in their nature, except as pertaining now and then to some nice point, not attended with any considerable expense.

6th. That the "delays," now made the basis of accusations against me, were of such a character that it was neither in my power to occasion or avoid them. That, moreover, the fact of delay was comparatively unimportant, inasmuch as the plan agreed on contemplated no beginning until a proper endowment-fund should be secured.

To these facts; I would add two more, viz:

7th. That until November, 1857, I never had reason to suspect the existence of any disaffection or coldness on the part of any member of the Board of Trustees. Notwithstanding the assertions which pervade the "Statement," and the garbled and falsified extract on its page 37, which is made to lead to an opposite inference,—no word or sign led me to suspect any other

feeling than high regard, confidence and a sense of gratitude in behalf of the institution. Strangely as this declaration may strike those who have read the "Statement of the Trustees," it is strictly true.

8th. That out of the seventy-one extracts from my private letters, which serve as the skeleton upon which the "Statement" is constructed, there are only eight which are correctly given as I wrote them, so far as I can ascertain. There are six which I cannot find in my press-copies. One of these I am certain that I never could have written; and one has been garbled. The remaining four, in the absence of proof to the contrary, may, perhaps, be assumed as quoted truly, and included with the eight above mentioned. Of the fifty-eight mis-quoted passages, there are forty-seven in which the changes are deliberate perversions, the motive of which is manifest; and, in twenty-six of them, the falsification is so extreme as to make me appear to say the reverse of what I did say,—or consists in some fabricated and interpolated words, upon which interpolation or fabrication some argument or inference is drawn to my discredit. Recurring to the eight genuine extracts, and to the eleven in which the perversions are not serious, there are several of these in which the quotation commences or ends abruptly, in order to exclude some statement or clause which, if given, would furnish an essential qualification or disproval of something imputed to me.

The whole of the charges of Mr. Olcott were after-thoughts; they were devised and concocted as the basis of that cunningly contrived book, by means of which my usefulness as a man, my standing as an astronomer, my character for truthfulness, my reputation for honesty, were all to be annihilated at a single blow.

There is but one additional point to which I would ask attention here, viz: the attempt of the Trustees, with the assistance of Dr. Brünnow, of Ann Arbor, to take from me what little credit astronomers might be inclined to award, for the peculiarities of the Meridian-circle. Of Dr. Brünnow's motives, both my judgement and my feelings lead me to say nothing.

Up to the month of July, when this fierce attack was made upon me, I thought him not only a friend, but a devoted one; and the declaration of Mr. Olcott that our mutual relations were such as to preclude co-operation, brought in his case, as in Prof. Mitchel's, rather a sense of amusement at the absurdity of the statement than any other sensation.

It was not until some time afterwards that the truth became manifest, that Dr. Brünnow had been induced to minister to the the cabal against me. In regard to the Meridian-circle,—if he really examined the instrument in Berlin, the most charitable conclusion I can come to, is, either that his recollection has failed him, or that I have hitherto over-estimated his knowledge of instruments. A general view of the principles upon which this instrument is constructed may be found in § 7 of this chapter, where passages are cited from my description of it before the American Association, to which Dr. Brünnow listened with every appearance of attention, and at the close of which he offered me his apparently sincere congratulations.

It is worthy of remark that neither of the two co-laborers in science,—who, from being trusted friends, deserted me and became open and avowed enemies upon the first appearance of need on the one side, and temptation on the other,—are my countrymen.

I have now presented a full history of the Observatory since my relations with it commenced; as also a reply to the principal false accusations brought against me by Mr. Olcott and his majority. Here the whole case might be rested; yet, as heretofore stated, I propose to add a Second Part containing a Detailed Refutation of the misstatements of my Accusers, in regular order.

And in closing this General Reply, I will present a summing up of the case, for which I am indebted to the kindness of an eminent friend, who has brought his powers of analysis and of clear statement to bear on the relations between the parties, and on the legal and moral duties and obligations flowing from those relations:

I. The Observatory was placed in Dr. Gould's hands, and to him was given the exclusive charge of the Institution as Chief Astronomer, he taking the title of "Director." To the Scientific Council, of which he was one, was given the supreme and exclusive supervision and control in all things affecting the scientific management and conduct of the Observatory. He was not an "officer" or "servant" of the Trustees, under the power of appointment given them by the act of incorporation. He was not in their pay, or in their employ, as such "officer" or "servant." He was in charge, with a corps of assistants of his own selection and choice, subject only to the Scientific Council, in the sphere of his proper functions, by virtue of a compact which the Trustees entered into with him and them, under the general power given them by the act of incorporation, relative to the management and disposition of the estate and concerns of the corporation.

II. For the indispensable objects of the compact, the exclusive and absolute possession and control of the dwelling-house, Observatory, instruments, library, and premises, passed from the Trustees to Dr. Gould, to be held by him personally, and in behalf of the Scientific Council,—subject only to such reasonable access, admission and privilege on the part of the Trustees as might be necessary for the due performance of their proper duties as the ultimate legal guardians of the property, and in the administration of the ordinary business affairs, and the finances of the Observatory.

III. The time during which this arrangement was to endure, was that period during which the Trustees should remain unable, for want of a sufficient available endowment, after meeting the other current expenses of carrying on the Observatory, to employ and pay a competent chief astronomer, and a proper corps of assistants, sufficient to do the proper astronomical work according to the true design of the Institution. The period contemplated was not less than two years, and might be much more. But in case of the failure of Dr. Gould, from any fault of his own, or by reason of inability from any cause not the fault of the Trustees, to perform all that he undertook to perform as the chief astronomer of the Observatory, the Trustees would be at liberty, and it would be their duty, to take the proper legal measures to put an end to the compact, and to resume their entire authority over the Institution.

IV. The pecuniary obligations of the Trustees under the compact were:

1st. In express terms, to provide the necessary means, supposed to be on hand or at command, for the proper mounting of instruments, and for indispensable equipments. This included the proper equipment of the Circle room, and of the Transit room (if needed), and the completion and putting up of all the requisite apparatus and appliances. It included also the payment of all debts or balances for equipments, instruments and apparatus, already ordered, and not yet completed or received.

2d. By necessary implication, to provide the means for completing the indispensable constructions and accommodations, at the Observatory, and at the dwelling-house, and about the grounds. Without this, there could be no occupation, and no beginning or prosecution of astronomical work.

3d, By express understanding and promise to Dr. Gould, to apply the balance of the "State appropriation," after deducting the

"actual outlay" of cost for the longitude determination, to the indispensable expenses of preparing and carrying on the Observatory, including furniture for dwelling-room and an office, fuel, lights and stationery, care of the premises, &c.

4th. By necessary implication, in case of the failure of the Trustees to receive the $2000 from the State, or any part of it, then to meet and pay these same expenses of preparing and carrying on the Observatory, out of other funds, if they should have such funds, or could procure them, applicable to these objects.

V. On his part, Dr. Gould was under no obligation to supply any of the means needed for any of the objects above stated. But he was at liberty, on any failure of duty, or any want of ability, on the part of the Trustees, in these particulars, to employ his own means, and apply them to any of these objects; the alternative being presented to him of doing this, or of abandoning the Observatory, for want of indispensable supplies from the Trustees. In case of applying his own means to any of the objects named, the Trustees would thereby be laid under obligations to reimburse him for such expenditures whenever in funds to do so.

VI. Dr. Gould and his assistants, being in the employ and pay of the United States Coast Survey, in which service—at the Coast Survey station established by the Superintendent, by permission of the Trustees, on the Observatory premises—a fixed portion of their time was consumed daily; it was only what remained to them of the proper working hours of each day which Dr. Gould undertook, for himself and his assistants, or which he or they were ever expected, to devote to the business and work of the Observatory,—the whole service being, in its inception, gratuitous and voluntary, but, once undertaken, carrying with it, under the compact, a just obligation of faithfulness to the Observatory, and the cause of science.

VII. Prof. Bache, the Superintendent of the United States Coast Survey, having, at the instance of the Trustees, consented to make the Observatory premises a Coast Survey station, and fixed it as the residence of Dr. Gould and his party of computers in the service of the Coast Survey; having erected a station building on the premises, and filled it with Coast Survey instruments and apparatus, and having, under a special contract with the Trustees, established the longitude of the Observatory, as a point in his system of triangulation for the great national work he has in charge; a strong legal and moral obligation in addition to other obligations, was thereby imposed on the Trustees not to disturb the existing arrangement and compact, without a complete justifiable cause, since, under that compact, rights had been acquired, not merely of personal value, but highly important as connected with great public interests.

VIII. The Observatory being a public institution, established and supported by private munificence, and devoted exclusively to a public use—that of the advancement of astronomical science; and the arrangement and compact with Dr. Gould and the Scientific Council having been made with a single view to give the Observatory the best scientific success, possible to be attained in its straitened financial condition, and under the actual circumstances of the case; the Trustees, acting strictly in a fiduciary character, have no authority or right, legal or moral, suddenly and prematurely to break up that

arrangement, unless they can show its manifest failure, without fault on their side, to secure the scientific objects and success anticipated and designed. And for this, there is not the slightest ground of pretence.

IX. No consideration or weight whatever is due to any of the allegations now made, as grounds for a rupture with Dr. Gould, where the pretended occurrences and facts were of a date prior to the compact of December, 1857, as ratified in January, 1858, and were confessedly as well known and understood then by the active agents and managers of the corporation, as they are claimed to be since. These pretended occurrences and facts are of such a nature, implying such gross defects of character and qualification, and such moral delinquencies, in Dr. Gould, that to suppose them true, or approaching the truth, would be to impute the deepest discredit and dishonor to those who knew and understood them, and who yet, in spite of them, and carefully concealing them, deliberately and voluntarily proceeded, upon their own motion and proposition, to place the Observatory in his charge. In every legal view, and in every moral view, all such allegations are to be regarded as mere pretences and inventions, to which no credit whatever can be accorded. Besides, a little examination and investigation show that they are without a shadow of foundation in fact to rest upon.

X. All the allegations of needless delays, and of undue demands for funds or means, on the part of Dr. Gould, since the compact and under it, are but an elongation of similar alleged faults of a date prior to the compact, and like them are mere pretences.

The question of delays in mounting instruments, and the like, was one of which the Director and the Council were the sole judges, because it was scientific work, and that alone, which was involved. And the Council have declared there had been no unnecessary delay.

The question of demands for means was one which referred itself properly to the compact and the understanding between the parties. But the Trustees having the financial management wholly in their hands, could control, and have controlled, all expenditures from the funds of the corporation as they pleased.

XI. The visits of individual Trustees to the Observatory on the 19th and 21st of May last, and their demand for admission to the rooms and instruments in the absence of Dr. Gould, were flagrant violations of his right to exclusive possession and control of the premises for all purposes connected with the scientific conduct of the Institution; and were manifestly designed to set up and establish a right on their part to interfere with him in his exclusive control of the Observatory building, instruments and apparatus, and in the distinct sphere of his scientific duties and responsibilities.

The episode of the pretended incivility of Dr. Gould's assistants to these visiters, in refusing to give them his keys, belongs to this well-devised experiment; and the charge of a vicarious "intentional insult" by Dr. Gould *in his absence*, based on this affair, is a gratuitous absurdity.

XII. The resolutions of the Executive Committee, of the 22d of May, 1858, presented three demands:

1st. That the Observatory grounds be converted into an open park or promenade for the public.

2d. That the Observatory building be thrown open to the public, under prescribed rules of admission.

3d. That individual Trustees should have free and independent access to the Observatory building, and all its rooms, at any and all hours, by means of duplicate keys, in the Director's absence, as well as when present.

And these demands, besides setting up a pretence adverse to the right of Dr. Gould to the exclusive control of the premises under the compact, involved directly and necessarily the most important considerations affecting the scientific work and operations to be carried on at the Observatory—points which fell exclusively within the province of Dr. Gould, under the Scientific Council, to decide, which the Trustees were wholly incompetent to determine, which they had no right to determine, because out of their sphere under the compact, and which they could only draw to their jurisdiction by usurping the functions of the Director and Council. Dr. Gould, to whom alone, under the Council, these questions referred themselves, decided and declared that these demands were wholly incompatible with the objects and the due prosecution of the work, for which the Observatory was founded.

XIII. If any "Want of Harmony" existed between Dr. Gould and any of the members of the Board of Trustees, not leading necessarily, and by his own fault, to the interruption, obstruction or hinderance of the Director in his proper scientific work, and in the scientific conduct of the Observatory, such "Want of Harmony" formed no excuse whatever for an attempt to put an end to the compact and oust him from his possession. And as the only "Want of Harmony" disclosed in the showing of the Trustees, as leading to their resolutions of the 4th of June, 1858, and thence to their bolder acts later in June, and in July, manifestly arose from the attempted interference of some of their number, and of the Executive Committee, with the proper rights and authority of Dr. Gould, by acts and demands, which, if acquiesced in, would have rendered the scientific control and management of the Observatory in his hands for any useful purpose, wholly impossible, it was simply taking advantage of their own flagrant wrong, to make such a matter of difference a pretended ground for an attempt to break up the compact and dispossess the Director.

XIV. When the Trustees went, by one stride, from a simple complaint of a "Want of Harmony" on the 4th of June, without any pretence of farther causes of complaint occurring in the meantime, to the official acts and resolutions of the 26th of June, by which "the immediate withdrawal of Dr. Gould" was insisted on, and sought to justify this action by vague allegations against him, then for the first time presented, importing incapacity and general unfitness for his duties; they stepped entirely out of their province, and assumed the very functions they had themselves expressly assigned to the Scientific Council by the compact.

By the terms, both of the compact, and of its ratification, the Council alone were charged with the whole responsibility of the scientific conduct and character of the Observatory in the hands of Dr. Gould. The question of his scientific qualification and fitness, and whether his duties were well or ill performed, if seriously raised by the Trustees, belonged necessarily to the Council under the agree-

ment. If "the supervision of the Scientific Council" over the Observatory, given them by the Trustees, did not cover this duty, then it covered nothing, and applied to nothing, and was nothing.

And the attempt, therefore, to force Dr. Gould to a withdrawal on any such grounds, by the sole will of the Trustees, without consultation with the Council, without notice to them, and in defiance of them, was a naked and wanton assumption of impotent authority, in gross violation of their own agreement, and in contempt of the proper interests of the Observatory as provided for under it.

XV. It was the duty of the Scientific Council, upon the injurious suggestions made by the Trustees, to institute a searching inquiry into the conduct of Dr. Gould, in his management of the Observatory, and into the manner in which his duties had been performed. This they did, and, after thorough investigation, they informed the Trustees that there was no foundation whatever for any complaint against him.

The Trustees had then all the assurance, and all the proof, that they needed or the case required, that the Institution of which they held the legal trust, was properly and satisfactorily cared for and conducted, and was completely answering the designs of its chief founder and its donors, and the scientific objects of its organization, as far as its limited means would suffice, under the arrangement and compact which they had made to this end.

And when, therefore, the Trustees proceeded on the 3d of July last, to take the step, to which their previous measures had pointed, that of officially declaring all relations with the Council dissolved, and forbidding their further occupation of the premises—they only added one attempt more to the many already essayed, without the shadow of a justifiable cause, to trample their own solemn compact under their feet, and thus, by a high breach of official trust and duty, expose the Observatory, and all the great interests connected with it, to an utter sacrifice.

XVI. The Trustees have taken no material step in this business against Dr. Gould and the Scientific Council, which has not been in direct repudiation and defiance of their compact with them.

For their justification, whether in a legal or moral view, the Trustees must be prepared to assume and maintain that, without fault of their own, there has been an essential failure on the part of Dr. Gould to perform his undertaking under the agreement, so far complete as to amount to a breach on his part.

But the attitude of the Council, to whom the exclusive duty of "supervision" for all scientific purposes was assigned, and who assumed that duty under the compact, in maintaining and declaring to the Trustees, as they have, that all Dr. Gould's duties under the agreement have been well, faithfully, skilfully and successfully performed, make it necessary for the Trustees in their defence, to assume and maintain one or both of two other positions.

1st. They must bring against the Scientific Council, as against Dr. Gould, the sweeping accusation of incompetency and unfitness for the charge and superintendence of the Observatory, and an utter inability to know or decide whether Dr. Gould's duties have been well performed or not; or

2d. They must take a higher and bolder ground; that the Council, from whatever motive, are in a corrupt league and conspiracy

with Dr. Gould to screen him from all just censure and deficiencies, and to continue and secure to him and themselves the possession of the Observatory, for some unexplained object of their own, foreign to, and incompatible with, the true scientific objects for which it was founded, and in furtherance of which the compact between the parties was made.

They must be prepared to maintain, one or the other, or both these positions, along with that of the actual failure of the Director in his essential duties, whether from incompetency or any other cause, by competent and convincing proofs. In this way alone can they sustain themselves, either in law, or before an intelligent public, in the right they have asserted to put an end to the compact, and cause the Director and Council to be dispossessed of the premises.

PART SECOND.

DETAILED REFUTATION

OF THE

"STATEMENT OF THE TRUSTEES."

In the previous part of this Reply I have endeavored to consider singly the several subjects alluded to by the Majority in their "Statement," and to narrate the facts bearing upon each of the points which they have used as the basis of attacks upon me. Knowing, not only that my motives and aims, from the beginning to the end of my connection with the Dudley Observatory, have been disinterested,—that, for the sake of saving it from bringing disgrace upon the American name, of becoming a reproach instead of an honor, and furnishing an obstacle instead of an impulse to science, I have deliberately made almost unparalleled sacrifices of present and future welfare;—knowing that there is not an act of mine, in reference to the institution, upon which I do not desire and earnestly ask scrutiny,—feeling indeed a satisfaction at what it has been my privilege to succeed in accomplishing, despite impediments of which the public is now for the first time becoming aware, and without agency of mine,—it appeared to me desirable rather to present a clear narration of the simple truth, than to enter upon arguments or the presentation of evidence. For it has been my good fortune to pursue a course which my judgement still approves in most cases; and I believe that my word yet passes for something, notwithstanding these ferocious attacks upon my character, name and repute.

Although the true state of the case has thus been presented so far as appears to me requisite for showing the falsity and wanton malignity of the "Statement" of the Majority,—I propose, in compliance with the advice of friends, to offer a Detailed Refutation of this Second Attack. And I shall therefore now proceed to follow the "Statement" of the Majority, paragraph by paragraph, in order to show the unprincipled and shameless character of its assertions and insinuations.

In doing this, it will in some instances be necessary to quote from letters written to me by signers of this Second Attack. The character of my correspondence with Messrs. Olcott and Armsby, (the two members of the former Executive Committee,) has already been mentioned, as has the fact of their dishonorable employment of my private letters for base purposes. However thoroughly a similar course on my part might serve the purpose of rendering my opponents obnoxious, I cannot, of course, follow their example in any attempt voluntarily to employ the tokens of past confidence as the weapons of present treachery. Better leave every one of their slanders unrefuted, every one of their falsehoods unexposed, every one of their stratagems still masked, and trust to the unconquerable force of Truth; for Truth must ultimately prevail, although the victims of deceit may meantime be rendered unable to profit by this ultimate triumph. I shall avail myself of the letters in my possession, in those cases where their employment is necessary or important, in order to refute the falsehoods of their authors, but abstain scrupulously from any use of passages not requisite for such disproval, or needed in the strict line of self-defence. The amount of control and forbearance thus imposed will readily be appreciated by all.

1. *History previous to August*, 1855.

The candid reader who will glance at the beginning of chapter IV. of the First Part of this Reply, and at the first four pages of the "Statement" of the Majority, will be able without farther investigation to form some idea of the character of my Accusers and of their accusations.

I will consider some of the prominent assertions of the Accusers in these four pages:

(*a.*) That the project of establishing an astronomical observatory in Albany was first suggested by Dr. Armsby in the winter of 1851; that Thomas W. Olcott was the first to promise aid and support; and that he was the first to subscribe.

The suggestion of an observatory has been repeatedly attributed to Prof. Mitchel by Dr. Armsby, publicly and privately;—Prof. Mitchel having urged the project in his lectures delivered in Albany in the winter of 1850–51. Mr. Prentice, one of the minority, then gave a sum twice as large as Mr. Olcott, and quite as promptly.

(*b.*) That in August, 1851, "the project received some slight check, from the discouragement of Messrs. Bache, Peirce and Henry, who, at a meeting at the Mechanics' and Farmers' Bank, advised against the enterprise."

I am authorized to declare that the assertion that Professors Bache,

Peirce and Henry checked the enterprise in any way is entirely untrue. These gentlemen attended no meeting in reference to the Observatory at that time or place, nor were they consulted in regard to it. The meeting referred to was one in favor of a University, and so far from opposing, they gave their cordial support to the movement. It thus becomes unnecessary to contradict the contemptible insinuation that their support was withheld because Prof. Mitchel was connected with the enterprise. Their relations with this gentleman were of the most agreeable character; and the degree of disposition of Professors Bache and Peirce to oppose an enterprise because conducted by him, may easily be tested by reference to pages 117, 118 of these Accusers' own pamphlet.

(c.) That Prof. Mitchel's letter of 1851, July 28, was read at a "social gathering" at Dr. Armsby's house, 1851, July 3, and furnished the basis for subsequent proceedings;—and that the progress of the enterprise was only checked in 1855 by Prof. Mitchel's temporary inability to remove to Albany.

The want of accordance in dates is palpable at once. Every citizen of Albany knows, too, that the enterprise was in the summer of 1855, dead and stagnant, and that Professor Mitchel's indisposition to come was anything but a "temporary inability." See also the letter of Prof. Walker on pages 37, 38 of this Reply. And I have letters from Dr. Armsby in my possession which could be produced, if proper or necessary, very thoroughly disposing of the present assertion, p. 6, that

"The Trustees, however, continued [in 1855] to receive assurances from that distinguished Astronomer, that, as soon as these engagements should be fulfilled, he would at once devote himself to the interests and objects of the Observatory."

(*d.*) That "in September, 1851, Mr. Olcott procured from Mrs. Dudley a subscription of $10,000."

The earnest desire of Mr. Olcott to usurp the credit of Mrs. Dudley's donation is manifest here, as also on page 8 of the "Statement," where he speaks of himself as having solicited her to give $6,000; on page 9, $8,000 more; and on page 23, where he claims that he "obtained from Mrs. Dudley the munificent donation of $50,000." But all this is in striking conflict with the unmanly, indecent assault on page 98 upon this whole-hearted and now much-abused lady, of whom Mr. Olcott says:

"The man who dared to invade the seclusion of this aged lady, and obtain her signature to this paper, a letter uncomprehended and incomprehensible, as it was, by her, is guilty of *moral forgery*."

The double falsehood contained in the assertion will be exposed in due course,—I allude now to other and equally dishonorable characteristics of the proceeding. Either Mr. Olcott was guilty, in 1851 and 1855, of

something worse than what he calls "moral forgery," in obtaining from her large sums of money; or his endeavor to insult and distress Mrs. Dudley now, because she had called upon him to resign the trust he was abusing, is base beyond epithet.

(*e.*) That the donations then given were bestowed at least four years before Mrs. Dudley, or the Trustees, had contemplated the connection of any scientific gentleman with the Observatory, except Prof. Mitchel.

For the exposure of this "loose" assertion, made with an object, I would again refer to pages 38 and 39 of this Reply.

(*f.*) That in March, 1852, when the charter was granted, the total of subscriptions had reached the sum of $25,000.

It is stated by the Accusers, page 81, that "prior to the first of August, 1856, there had been expended, in the erection of the buildings contemplated by Prof. Mitchel, the sum of $22,449.98." Thus a balance of at least $2,550 seems to have been on hand since March, 1852, a fact which should be borne in mind when the hoped for investigation of the finances takes place.

The ungrateful and coarse sneer, page 4, at General Van Rensselaer, to whose liberality and public spirit the institution is so largely indebted, requires no comment.

2. *Utility of Heliometer.*

No such discussion relative to "the Utility of a Heliometer" took place at the Providence meeting of the American Association,—as the Majority allege. And the suggestion of employing this instrument to triangulate the Pleiades is altogether too old a one, and too well known to astronomers to make the attempt to assign its paternity to Dr. C. H. F. Peters of any avail. It originated thirty years ago with the great astronomer Bessel, who carried it into execution during the eleven years between 1829 and 1840, (*Astr. Nachr.* VIII, 416, XVIII, 353,) and it had been renewed by Walker, in a published report on the subject to the Superintendent of the Coast Survey. Whatever allusions may have been made to this instrument were essentially collateral and incidental, and only affected the Observatory project by affording a favorable opportunity to Dr. Armsby, who had visited Providence for the purpose of enlisting the support of the gentlemen who were a fortnight later elected as the Scientific Council of the Observatory.

3. *Professor Bache's proposition of August*, 1855.

The statement on page 7, that Prof. Bache proposed that the citizens of Albany should provide a Heliometer, is without foundation in fact. The

proposition was Dr. Armsby's, and was not accepted by Prof. Bache until the proposer had (untruly as he now declares) alleged that he had the indorsement of Hon. J. V. L. Pruyn for the feasibility of the undertaking. This transaction is fully set forth on page 40 of this Reply. Dr. Armsby wrote, 1855, September 15, thus:

"We appreciate most highly the generous offers of aid from Professor Bache, and we trust that neither Prof. B., nor his distinguished associates will ever have cause to regret their connection with our Institution."

4. *Quotation on page 7.*

This being the first extract in the book from anything written or said by me, is necessarily the first specimen of garbling. It is taken from p. 26 of the Inauguration pamphlet; but the specimen is not a very important one. The words omitted from the middle of the sentence are these:

"on learning that a Heliometer was the instrument most appropriate for the class of observations required,"

the palpable motive of the omission being to avoid the discrepancy which it would manifest with the assertion, ten lines previous, that the proposition of the arrangement came from Professor Bache.

The anxiety of Messrs Olcott and Armsby, here as on pages 25, 26 and 27, to reprint whatever words of compliment to them I may have uttered, before their true characters became known to me, is characteristic.

5. *Magnanimous withdrawal of Prof. Mitchel.*

The assertions of the Accusers on page 7 are so diametrically opposed to all the declarations of Dr Armsby at the time, and present the whole of the relations with Prof. Mitchel in so different a light, that it seems necessary to enter upon a subject which would otherwise have been passed over in silence. The insinuation that I could thus have stepped between Prof. Mitchel and the direction of an institution which he had planted and fostered, and which was about to blossom, is as false as it is insulting. Dr. Armsby then stated, what I still believe to be correct, that Prof. Mitchel was unwilling to identify himself longer with the institution; that his interests and tastes were diverted into other channels; and that he had severed every connection which ever existed between himself and the Observatory. Dr. Armsby also stated,—what I also believe to have been correct,—that the institution threatened to be a disastrous and melancholy failure; he said that every dollar which had been subscribed had been expended in mere building, as yet far from being adapted to Observatory purposes; and that it would only by some vigorous effort be possible, to prevent past expenditures from being worse than wasted. Such an effort he appealed to Professors Bache, Peirce, and myself to make, and we

responded to the best of our several powers, upon the condition that inadequate beginning should be attempted.

And yet, on page 45, these Accusers now allege that—when, in October, 1857, the requisite endowment being far from complete, the Council were indisposed to commence the immediate activity of the Observatory:—

'The Trustees' "thought of the fact that Prof. Mitchel had designed commencing practical operations at the Institution with $25,000, which he had declared enough for a useful beginning."

This is a foolish falsification. Prof. Mitchel never designed or proposed to commence operations with $25,000 expended in a building, without any instruments, or a dollar in funds.

And on page 81, they say:

"From the time Prof. Mitchel magnanimously yielded his position in the Observatory to Dr. Gould, &c., &c."

It thus becomes necessary for me to quote one or two passages from letters between myself and Dr. Armsby,—which would otherwise, of course, have been omitted. They are by no means all that might be quoted, but they will suffice.

From a letter of Dr. Armsby, 1856, *April* 19.

"I was sorry I did not see you again before leaving New York, and beg you will pardon me for troubling you with the invitations, and the foolish twaddle of Mitchel. . . . . I should never have thought of consulting him in this matter, nor have invited him to take part in the inauguration, had it not been suggested by your remark when you were last in Albany. . . . . And when I showed you his unkind letter to me, you may remember you remarked "he must be set right or conciliated." . . I shall give myself no farther trouble to conciliate him. He feels deeply chagrined at the interest now taken in the Dudley Observatory, and mortified by the neglect with which he is received by Albanians. His foolish remarks have destroyed all the influence he might have had, and now every one here says we are fortunate in getting rid of Mitchel."

From a letter of Dr. Armsby, 1857, *April* 20.

"Mitchel, by his foolish remarks, has lost all his friends in Albany. There was always a suspicion of him in regard to ingenuousness, and even sound learning; and now the Trustees feel a relief that we are free from all obligation on his account."

From a letter of Dr. Armsby, 1856, *May* 14.

"My error in writing to Mitchel, . . . was not my own, and I now regret it, as I do most truly having had anything to do with the matter."

Up to this time I had refrained from any reply to these continued complaints, in which I did not sympathize, regarding Professor Mitchel, but in the copy of a letter written by me to Dr. Armsby, 1856, May 15, I find the following sentence:

"As for Mitchel, let him go. He feels hurt and vexed with himself as well as others; and we do not know what private griefs and troubles he may have, to make him feel captious and irritable."

Later than this date I find in my own letters no noticeable allusion to Prof. Mitchel,—a gentleman for whom I have always entertained the kindest regards, which have prevented me from responding to the abundant oral and written tirades against him of more than one of the signers of the "Statement."

But in a subsequent letter from Dr. Armsby, 1856, July 20, he says:

"Prof. Mitchel spoke . . . . in the highest terms of our Observatory, and its organization and prospects. I think he still hopes for an invitation to take part in our inauguration, and would be delighted to do so. . . . . But he does not deserve it."

Dr. Armsby's history of the Observatory in Munsell's Annals, (published in the autumn of 1856,) contains no allusion whatever to Prof. Mitchel—not even mentioning his name!

6. *Appointment of the Scientific Council, pp.* 8, 9.

The time and manner of the appointment of the Scientific Council has already been spoken of in Chapter IV of Part First, pp. 44, 45, and need not be recapitulated here. The bad faith of the Authors of the "Statement" will be obvious to any one who will read with care their paragraph relating to the appointment. The fact of the election of the Scientific Council, Sept. 8, 1855, is kept in the back-ground, quite as much as is consistent with the subsequent pretended "ratification" of their alleged "informal election."

The Trustees withdrew into an adjoining room; remained in private session; then re-appeared; the Secretary announced the election of the four members, Professors Bache, Henry, Peirce and myself as the Scientific Council; and he subsequently exhibited to me the formal record of the same in the Record Book of the Board of Trustees. "The name of the late Dr. Beck was" not "added at the same time;" but some time later, when I was regularly notified of it by Dr. Armsby.

The remark about Commander Davis is another of the numerous attempts of the Accusers to engender ill-feeling wherever possible,—and is essentially false. This gentleman being a near relative of Prof. Peirce, the apparent opportunity for creating feeling appeared altogether too good to be lost. My relations with Captain Davis, at the time, were not cordial, and it is very possible that I may have mentioned this privately to Dr. Armsby; but that I procured his name to be stricken from the list is untrue, as also is the assertion that I made any allusion to our personal relations prior to the election of the Council. It will not be forgotten that this election, too, was made on the very first occasion that I met any one of the Trustees, excepting Dr. Armsby, whom, moreover, I had only seen

in the short interviews at Providence. Prof. Henry accompanied me to Albany on this occasion; it is his native city; he addressed the meeting of Trustees and citizens; his scientific eminence and high station rendered his support to this enterprise most welcome; and the assertion that his name was substituted for that of Commander Davis, because I had caused the name of the latter to be "stricken from the list,"—which list I had never seen, if indeed it existed,—is puerile. I had nothing to say regarding Commander Davis's name, either as to its addition or omission.

The statement that Prof. Peirce recommended an "*advisory* council," is untrue. One of the main conditions of the support promised the institution by us, was that its scientific guidance should be under *the direction* of scientific men. So, too, is the idea attributed (also untruthfully) to Professor Peirce, that the members of the Council "should be *associated with* the Board of Trustees!"

7. *Functions of the Scientific Council.*

Despite the strenuous efforts made throughout the Accusers' book to represent the functions of the Scientific Council as being "advisory" to the gentlemen who constitute the Board of Trustees;—despite the first resolution of 1858, January 19, in which the Council are said to have been informally elected and to have acted "as the Scientific Council of this Board," not as that "of the Observatory;"—despite the falsification of the second resolution of the same date by the author of the pamphlet, who has changed the words "as a Scientific Council" into "*as such Scientific Council*;—the distinct agreement from the day of the election in September, 1855, up to the day in December, 1857, when "the Observatory, under the supervision of the Scientific Council" was placed in my charge, was this: *That the scientific control was to be exclusively with the Scientific Council, and the financial control of course exclusively with the Trustees.* In this connection I beg to present the following extracts from letters and publications. The first is an extract from the remarks of Prof. Henry, made in the presence of Mr. Olcott, before the Board of Underwriters, in the city of New York, 1856, Nov. 19, and, when taken in connection with the following letters, will serve to show the close connection, good understanding, and warm feeling, of the parties at that time:

"The Trustees of the Dudley Observatory have honored Professors Bache, Peirce, Dr. Gould, and myself, with the office of Scientific Councillors of that institution; and, as it is the principal business of our lives to assist in the advance of knowledge, we shall cheerfully give a portion of our time and thoughts as our offering to the noble enterprise so energetically, liberally, and successfully commenced at the capital of this State."

"I may say, in addition to the remarks made by Prof. Bache respecting the character of the Dudley Observatory, that it is not *the design of its Councillors*

that its operations shall be confined exclusively to the heavenly bodies, but that also investigations shall be instituted which pertain more particularly to our globe."

These remarks were published, together with remarks by Prof. Bache, and resolutions of the Board of Underwriters commending the Dudley Observatory to the citizens of New York, in a pamphlet extensively circulated in that city for the purpose of stimulating subscriptions. This pamphlet was prefaced by the following letter signed "Thomas W. Olcott," and dated Albany, December, 1856:

"The Trustees of this Institution earnestly invite your attention to the subjoined documents. They show that the enterprise, though of particular interest to the city of New York, is yet national in its aims and character, and that the Trustees may with propriety appeal to the enlightened and the liberal of our fellow-citizens, from the emporium to the circumference of our country, for aid and co-operation. Professors Henry, of the Smithsonian Institution; Bache, of the Coast Survey; Peirce and Dr. Gould, of Cambridge,—compose the Scientific Council; and they pledge their reputations for the scientific success of the Observatory, provided it is suitably endowed.

"These distinguished scientific gentlemen are laboring for this Institution from the most exalted devotion to the science and honor of their country, and with a disinterestedness which has deprived the Trustees of the pleasure of even reimbursing them their actual traveling expenses when engaged exclusively on business of the Observatory."

At the same expedition to raise funds in New York, it was stated in all cases, to all persons to whom applications were made for subscription, that these four gentlemen were the Scientific Council of the Observatory, and were to have charge of all the scientific operations. Indeed, they were introduced as such; and it is no flight of imagination to believe that the money was principally obtained through such assurances.

Mr. Olcott, writing to Prof. Bache, 1855, August 27, says:

"Dr. Armsby has informed me of the arrangement between you and him concerning our Observatory, the particulars of which he says he expects from you, repeated in a letter, to be used by him as a basis for carrying out his part of the arrangement. I immediately imparted my delight to Mrs. Dudley, who has already advanced twelve thousand dollars towards the building; and she was so much pleased, that she placed in my hands at once a check for six thousand dollars, to be sent to you for the purchase of the Heliometer the moment your letter is received."

Again, in a letter to Prof. Bache, 1855, Aug. 30:

"I write now to say that the six thousand dollars are at your command, and that you may draw on me at sight; or I will remit the money when and where you may indicate. Permit me to assure you that our citizens will organize the association in a way to give the most entire satisfaction to the gifted individuals to whom we look to direct its operations; and our measure of rejoicing will be full when we are assured of the willingness of Dr. Gould to become a resident of our city. We intend to write that gentleman, giving him a welcome to our hospitalities, and assurances of our humble but cordial co-operation in his lofty and noble pursuits."

Again, Mr. Olcott, under date of 1855, Sept. 3, sends a copy of a letter received by him from Mrs. Dudley, which says:

"I notice, in the published correspondence concerning the instrument which Prof. Peirce is pleased, in his address, to name the Dudley Heliometer, that he says 'that it cannot be of inferior construction, but must be a masterpiece of art;' and that Prof. Bache says that he has not been able to ascertain the cost, but supposes it will not much exceed six thousand dollars. I therefore infer that the cost may exceed that sum; and you will oblige me by saying to Prof. Bache, that I hold myself responsible for one or two thousand dollars more, if necessary; and I hope he will do credit to science, himself and the donor, in securing an instrument superior, if possible, to any in existence."

A letter from Dr. Armsby, dated Albany, 1855, Aug. 27, states:

"The six thousand dollars, which I promised you for the Heliometer, is now on deposit at the Mechanics' and Farmers' Bank of this city, subject to your order!"

This arrangement was subsequently changed; and I was induced to go to Europe to purchase instruments and to examine mechanical workshops.

Dr. Armsby also, writing, 1856, Aug. 28, says:

"I can promise you confidently, when we have once started, all the future aid you my desire. . . . . When the Observatory is once started under your direction, Mrs Dudley will be much more likely to give $50,000 or $100,000 to endow it, than she was to give what she has already done;"

and then goes on to discuss the relations of different parties in Albany in a way which I refrain from presenting to the public.

Mr. Olcott to Dr. Gould, 1856, Nov. 24:

"We have just returned from New York. . . . Professors Bache and Henry were active and efficient. They argued for two days before the Board of Underwriters, which secured us their unanimous commendation to the mercantile community."

Mr. Olcott to Dr. Gould, 1857, Oct. 1:

"All we have done and are doing is for American science, and we are disposed to be governed altogether by our Scientific Council. We have unbounded confidence in them in every thing, and we wish them to consider us a humble instrument in their hands in carrying forward this great enterprise. We have not a personal object or interest in this matter. We are willing to sink or swim with a Henry, a Peirce, a Bache, and a Gould, as the only chance of immortalizing ourselves in this world. Therefore we submit this question to your decision."

Mr. Olcott to Dr. Gould, 1857, Nov. 9:

"Whatever our Scientific Council decide upon in relation to the Observatory, we shall deem the best. . . . We here feel ourselves to be subordinate agencies; and do not consider our reputations at stake, or in any way pledged, except to our Scientific Council. For all our pledges to them, and as much farther as our ability will allow, we stand committed. Fortunately for us and the cause of science, our services end here."

Mr. Olcott to Prof. Bache, 1857, Nov. 23:

"I am not, my dear Sir, unmindful of the humble position which I occupy in this great scientific enterprise. . . . . I certainly was willing to co-operate with distinguished scientific men, and was proud to enlist as a subordinate under your banners. It might never have been revived from the tomb of its repose but through your inspirations. . . . . I regard it as success, so far, as transcending our most sanguine hopes at the beginning. The services rendered by Prof. Henry and yourself in New York enabled us to gain a footing there, and your identification with the enterprise has given it a passport to the confidence and regards of the nation."

Mr. Olcott to Prof Bache, 1857, Dec. 19:

"If driven from our association with you, we shall be upon the ocean without a star to guide, or compass to direct our course; and we have no idea where, in such an event, we should land. . . . If permitted to labor with our present Scientific Council, we shall not cease in our efforts until the Dudley Observatory is elevated to a position to do credit to our country, and to the scientific men who have identified their names with the Institution."

Mr. Olcott to Prof. Henry, 1858, Jan. 23:

"I am sorry that we can be supposed capable of disappointing the expectations which we authorized you to indulge, and which our honor is concerned in maintaining."

It is not surprising, that, thus stimulated by high-sounding words, the Council imagined Mr. Olcott to be a second Lorenzo, and that, in language glowing with praise and compliments, they showed their awakened enthusiasm in the noble cause of which he was then the champion; but it must be admitted that the Council are now heartily ashamed of the round sentences with which their replies abound, and which the gentlemen eulogised have taken such pleasure in quoting.

During my visit to Europe, in 1855, Dr. Armsby proposed that an invitation to foreign astronomers to attend the Inauguration should be issued,—not by the Trustees, but by the Scientific Council. He wrote, 1855, Nov. 6, as follows:

"Would it not be well to give a special and additional invitation to astronomers to attend the Inauguration of the Observatory,—in the name of the Scientific Council? Although it would be superfluous so far as the invitation goes, it would let them know what is doing, and who are to be connected with the Institution."

8. *Mrs. Dudley's Subscription for the Heliometer.*

It is alleged by the Accusers, page 9, that

"About the same time, in order that the Heliometer might be the largest and best instrument of its kind in the world, Mrs. Dudley, at the solicitation of Mr. Olcott, as before, increased her subscription to $14,000."

The circumstances of the case have already been fully, and as I trust clearly, set forth in my remarks at the Inauguration. The gift of Mrs. Dudley was "$6,000, or more if needed." She gave Mr. Olcott, 1855, August 24, a check for $6,000; and, as I am now informed, a second check for $2,000 on the 21st of September, 1855, for the same object. When, after my return from Europe, the construction of this instrument had, in January, 1856, been awarded to Mr. Spencer, he was requested by me to prepare estimates for instruments of different dimensions and to submit them to Mrs. Dudley. Accordingly he immediately prepared and (Jan. 17) submitted these estimates. Mrs. Dudley selected the largest size, (ten inches aperture,) although its price was $14,500, and, as I am informed,

gave Mr. Olcott, 1856, January 19, a third check for $6,500, making the total amount, given by her, $14,500, exclusive of interest.

In a letter from Dr. Armsby, written 1856, November 6, is the following passage:

"Mr. Olcott has done another noble deed that I must repeat to you. He has had the Heliometer fund in his hands and loaned portions until the interest on it amounted to $500, and added it to the rest when he paid it over to the Treasurer of the Observatory."

Up to 1856, November 1, the accrued interest upon this fund would, by the laws of the State, have amounted not to $500, but to more than $1,000! This is a comparatively small matter, however, and chiefly important in connection with another strange circumstance.

In my remarks at the inauguration, I had said (p. 31):

"Mrs. Dudley who had so munificently raised her $6000 to $8000, has now raised the $8000 to $14,500."

The authors of the "Statement," in quoting this, on page 26, print $14,000 instead of $14,500. And again, on page 9, in the passage cited at the beginning of this article, they say:

"Mrs. Dudley, at the solicitation of Mr. Olcott, as before, increased her subscription to $14,000."

In Mr. Olcott's Manifesto he also states that this sum was $14,000; and in the second, or garbled, edition of the Inauguration-pamphlet, issued unknown to the Council and donors in June last, the same change is made (on page 22); thus diminishing the total of Mrs. Dudley's gift, instead of increasing it. Similar diminutions of amount are made in other places. In the same second edition of the Inauguration-pamphlet, Mrs. Dudley's donations, previous to the large sum towards the endowment, are given in the column of sums received, as amounting to $26,500; when they were in fact $27,500,—and so with regard to other donors. But I consider the full exposure of such points as these, as being out of my province,—and desire only in this Part of my Reply to show the falsehood and deception which pervade almost every line of the "Statement" of the Majority,—in order that no assertion of any one of its responsible authors, or certificate of its signers, may at any time be received as impeaching any man's good name for uprightness, truth, or discretion.

9. *The purchase of the Meridian-Circle.*

The "Statement" says, page 9:

"Mr. Olcott also authorized the purchase of a Meridian-Circle, to cost $6000."

The words "authorized the purchase" are ambiguous. In the sense, that Mr. Olcott, as the financial manager of the affairs of the Observatory, authorized the purchase, the assertion is correct. In the sense in which these identical words are used twice again, in immediate connection, and within the next six lines, denoting that the one who "authorized the purchase" was to give the purchase money, the assertion is false.

This point, like the one in § 8, acquires significance when taken in connection with other statements of the same Trustees, thus:

In Munsell's *Annals of Albany*, vol. VII, is a long notice of the Dudley Observatory, prepared and furnished, as I learn from the very best authority, by Dr. Armsby, the Secretary of the Board. He says in it:

"Mr. Olcott contributed $5000 for the Olcott Meridian Circle."

In the second edition of the Inauguration-pamphlet, my remarks on this subject are also mutilated.

On page 27 of the genuine edition will be found my words:

"*Two other gentlemen, through* Thomas W. Olcott, Esq., became responsible for a Meridian Circle to be provided without any limitation as to expense;"

but on page 19 of the spurious edition, published by the Board in June, 1858, the sentence is printed without the four words which I have italicised!

On page 155 of the "Statement," this same Mr. Olcott,—not content with so much done towards claiming the credit of giving an instrument, for which he had not contributed a dime,—prints the following sentence in the letter which he procured from Dr. Brünnow, of Ann Arbor:

"The Olcott Meridian Circle, (for this name has been given to the instrument *in honor of its* GENEROUS DONOR," &c!

The typography is mine.

10. *The Name of the Meridian-Circle.*

As regards the name, I will present a few quotations from the letters of Dr. Armsby:

Sept. 1855. "The Meridian Circle must be called the Olcott Instrument. You may give the order to have it so named or lettered, and without mentioning this fact in your letters. Let it be a surprise to him when finished. Whoever may furnish the funds, we all agree as to the name."

Sept. 1855. "On the Meridian Circle I would have THOMAS W. OLCOTT conspicuously engraved."

Nov. 1855. "The Olcott Meridian Circle must be worthy of its name. There are but few such men as Mr. Olcott!"

June, 1856. "The *Olcott* Meridian Circle *must* be the name. . . . Let the name be in as large letters as consistent with good taste."

My letter from which a garbled extract is given in the "Statement," on page 20, was in reference to this!

In compliance with the application of Dr. Armsby, the Scientific Council recommended the giving of this name; and at his instance, also, I made

a public announcement of the fact, alluding to Mr. Olcott in language which I wish he had better deserved,—although I am by no means the only person who has been thus deluded and deceived.

11. *Mr. Corning's Subscription.*

Few and perhaps none of the circumstances connected with the Observatory have been made the subject of more elaborate and complex misrepresentation, than those relating to the Corning Clock.

The facts relative to Mr. Corning's gift, (for this gentleman, like Mrs. Dudley, General Van Rensselaer, the Scientific Council, Mr. Pruyn and others, has been scandalously insulted in the "Statement," in reference to his generosity to the institution,) have been concisely and clearly given by him in his published letter to Mr. Thacher, and are briefly as follows:

At the outset of the Observatory enterprise, Mr. Corning being appealed to for contribution, and informed that $25,000 were needed, and that $5000 could be obtained in comparatively small amounts, agreed to give $1000, on condition that nineteen others should each do the same. His chief motive in attaching this condition was, that, knowing the persons who sought to identify themselves publicly with the movement, he felt the importance of throwing some such guard around the treasury and of insuring the interest and oversight which a fulfilment of this condition would tend to create. The condition was never fulfilled; but at a later date, at the request of Dr. Armsby, Mr. Corning agreed to *transfer* this conditional subscription into a subscription for the normal clock; to be paid for when it should be finished and placed in the Observatory.

The clock was ordered by me of Krille, in Altona, at the close of October, 1855; and the maker promised that it should be completed in May, 1856,—it is not yet received, owing to circumstances beyond my control, and in spite of my urgent and reiterated efforts. When it arrives the money will be paid.

Some of these facts have but recently come to my knowledge, for Dr. Armsby—knowing that the cost of the normal clock would be much less than $1,000, although this sum was named to Mr. Corning by him,—had represented to me that the object of the donation was "to supply the Observatory with time," i. e. to provide clocks for mean and for sidereal time, and dials so far as possible. Accordingly, in my remarks at the Inauguration, I said,

"The Hon. Erastus Corning, of this city, subscribed $1000 for providing the Observatory with time." (p. 27.)

The Majority now [p. 11] accuse Mr. Corning of "repudiation," because the first subscription was not paid; and as a double fling at him and myself, they venomously add:

"The Trustees have now but little reason to hope that the Corning Clock, or either of the Corning subscriptions will ever be received."

Even so early as in the summer of 1855, Dr. Armsby had placed below the large marble dial for mean time, then in the Observatory, a tablet bearing the words: "The Gift of Erastus Corning." [See Inaug. Pamphlet, page 29.]

And in August, 1857, Dr. Armsby wrote to me that he had applied to Mr. Corning for still another $1000, to pay the entire expense of all the dials, chronographs, &c., and added:

"Mr. Corning says his $1,000 will be ready when the clock arrives, but the $1,000 for the setting up, &c., he must think of before he decides. I am still hopeful in regard to the future funds."

In the notice of the Observatory in Vol. VII. of Munsell's Annals, prepared and furnished by Dr. Armsby, as already stated, occur these words:

"In a niche on the right is the celebrated clock presented by the Hon. Erastus Corning, for giving time to the Central and other railroads diverging from Albany!"

And finally, in the spurious edition of the Inauguration pamphlet, page 98, it is said, (June, 1858).

"The Corning Clock was ordered by Dr. Gould, in Altona, in 1855. It will cost $1,000. Hon. Erastus Corning has agreed to pay for it when completed."

These accounts by the Majority are certainly not consistent with one another! The incorrect assertion that the sidereal clock would cost $1000 was quite gratuitous, and needless even for the Accusers' purpose, which was to represent this Normal Clock as the one to which the name "Corning" is applied. And it is inconsistent with the declaration on the tablet that the Corning clock is also the gift of the citizen whose name it bears; since, if the $1,000 was consumed in buying the one, it could not be applicable to the purchase of the other. But in one point, and one only, they are accordant. They contradict the present pretence of their authors that Mr. Corning is likely to "repudiate" this subscription.

12. *The Expedition to Europe.*

For some unexplained reason, probably in order to make my connection with the Observatory appear the result of some officiousness on my part, the assertion of the Manifesto, already contradicted by the Scientific Council in the "Defence," § 2, is repeated in the "Statement," pages 9 and 154.

Not only did I not "offer to sail forthwith to Europe" to "secure" instruments for the Observatory, but I went at the urgent entreaty of Mr. Olcott and Dr. Armsby, the gentlemen who now assert the reverse. The expedition entailed an amount of back-work on my return, under which, added to the new labors in behalf of the Dudley Observatory, my health became much impaired. The voyage was undertaken in fulfilment of a promise made upon what I supposed an impossible condition,—the assent of the Superintendent of the Coast Survey,—an assent in no man-

ner solicited by me. This expedition, like all my other labors for the institution, was unrecompensed by remuneration, or in the end, even by gratitude,—however my expectations of the latter reward might have been excited by protestations like those in the following passages from letters addressed me by Dr. Armsby:

1855, Sept. 15. "Your highly satisfactory letters of the 11th inst. came to hand last evening, and I am rejoiced to learn that both Prof. Bache and yourself respond so promptly and cordially to our wishes in regard to your proposed expedition to Europe. . . . . We trust that neither Prof. B. or his distinguished associates will ever have cause to regret their connection with our institution."

1856, Jan. 30. "I will never lose sight of the Observatory, nor forget your toils and labors in its behalf."

The assertion on page 10, that by "positive assurances and promises" I induced the "the Trustees" to believe that "the instruments could all be landed in Albany before the first day of August, 1856," is a deliberate misstatement. Far from giving any such promises, I expressed my strong convictions to the contrary; and only changed my mind in any degree when, after arriving in Europe, I had executed contracts for the Circle and Transit, which would be annulled by the failure to complete them in due time.

13. *European Expenses.*

Few things could be more contemptible than the attempt, on page 11, to sneer at my "account of expenses" on the European journey. Nothing could be more contemptible than basing such an attempt on wilful falsehood. And any farther possible baseness is supplied by the fact that this was done in the face of the real facts, as stated by the Council in §2 of the "Defence." The "Statement" of the Accusers, says:

"His account of expenses was rendered and immediately audited and allowed. It is but justice to state that these expenses were commendably moderate, being scarcely one hundred dollars more than the expenses of Mr. Gavit, or Mr. Spencer, who afterwards spent the same time in Europe, and traveled over the same ground, at the charge of the Trustees."

Will it be credited that no account of expenses was ever brought in by either of these gentlemen, or desired of them; that the definite sum, of $750 each, as the allowance, was placed in their hands before leaving home; that my accounts were never audited, although I requested it; that their total was £144 3*s.* 7*d.*, or *less than* the sum allowed Messrs. Spencer and Gavit, and which did not suffice them;* that this amount was not so much as one-half of my real expenses, but was my estimate of the minimum for which the journey could have been made, excluding all luxuries and all visits to places where my presence was not necessary for

* See Appendix F.

Observatory purposes? Yet all this is true. I would be willing that my Accusers should be judged from this one accusation,—furnishing, as it does, an example of littleness, ingratitude, untruthfulness and vulgarity all combined.

14. *Proposition to N. Y. Central Railroad.*

It is stated by the Accusers (p. 12) that I addressed a letter to the Directors of this Company, signed by myself and Prof. Bache, and offering to furnish the road with time for $1,500 a year; that the Directors at once accepted the offer,—and that my "performance of engagement" would have secured this fifteen hundred dollars as an income to the Observatory.

Each of these assertions is untrue,—and the alleged quotation given from the letter, in order to enforce them, is thoroughly garbled. Of the fifty-four words in the sentence as quoted, only forty-five were in the original, nine words having been inserted by the Accusers, as well as five words stricken out. I will not dwell, however, upon this, but will simply state the facts.

The letter was signed by General Van Rensselaer, as President of the Trustees, and by myself as Secretary of the Council;—it asked $1000 as remuneration; it proposed to transmit "the exact time of the Corning Clock,"—(this name, by which the mean-time clock is designated whenever alluded to, is here carefully omitted by the Accusers;) and when the meeting of the Directors was held, after my departure for New Orleans, Prof. Bache attended to explain and commend the proposition. It was referred to a committee with power. The delays of the work at the Observatory were so great during the summer, (1856,) that Mr. Olcott advised me to delay any action in the premises until the Corning clock should be in place;—hoping that the New York Common Council would meanwhile accept the offer made to that city at the same time,—a hope which was not fulfilled. The Corning clock being put up previous to the Inauguration,—my next visit to Albany after that event, was improved to confer with the Chairman of the Railroad Committee, who authorized me to have two dials constructed for automatic regulation by telegraphic signals. The order was given by me within two days;—and the details carefully discussed with Mr. Farmer. The construction of these automatic dials was delayed, not only by the circumstances alluded to on page 155, Part First, (Chapter VI, § 12); but by numerous technical difficulties of construction, all which were finally surmounted by long experiments, (not at the expense of the Trustees) and the dials were received a few weeks after my removal to

Albany. These, together with the signal-giving apparatus, were among the clocks, for procuring which I was so violently attacked by Mr. Olcott; who, in the Manifesto adopted by the Majority, pronounced them "useless only as toys for the entertainment of his [my] juvenile companions and of visiters." So that he has attacked me—both for providing them, and for omitting to provide them. Farther information concerning them may be found in the Chapter on "Clocks and Time-Signals," already cited.

15. *Time for New York City.*

The matter of the offer to New York (p. 13) is even more thoroughly falsified than that of the Central Railroad offer. The letter from which the alleged quotation is made was addressed to the Mayor, and transmitted by him to the Common Council, with a recommendation that the offer be accepted. It may be found in the principal New York newspapers of Feb. 14. To a very garbled extract the Accusers prefix the words "Dr. Gould said;" whereas the letter was signed by Stephen Van Rensselaer, *President*, Thomas W. Olcott, *Vice President*, A. D. Bache and B. A. Gould, Jr., *for the Scientific Council.*

It is true that I wrote the letter, but it is also true that, were there anything wrong about it, Mr. Olcott would be quite as responsible as myself. But there was nothing wrong. The proposition was a very liberal one; viz.—to send the time-signals gratuitously, if New York would provide and undertake the necessary means; and these means were: in the first place the telegraph wire,—provided the exclusive use of some existing one could not be obtained for certain hours daily; and, in the second, some apparatus for exhibiting the signals to the shipping,—an end attained in Greenwich by the dropping of a ball, and for which I recommended the falling of four arms from a vertical to a horizontal position. The expense of a special wire to New York was incorporated into the estimates when the plan was discussed with Mr. Olcott in January, 1856, although the contrary is alleged in the scandalous misrepresentation of the Accusers on page 34 of the pamphlet,—and the original paper containing figures of which he will not venture to dispute the authenticity is still in existence.

Strong efforts were made by my friends, and especially Messrs. Swan, of the Common Council, and George W. Blunt, to induce the City to accept this proposal, but unsuccessfully. A falsehood on page 19, in this connection, is used to create, if possible, unkind feelings between myself and Mr. Blunt,—as have been also garbled extracts from letters, privately transmitted to him since,—though happily without success.

I append the extract as garbled by the Accusers side by side with the correct version.

From the "Statement of the Trustees," page 13.

And at the same time, in a letter to the Mayor of New York, Dr. Gould said:

"The Trustees of the Dudley Observatory, which has been erected in Albany, and is to commence its activity in August next, (1856) beg leave to express to your Honor, the pleasure it will afford them to furnish the city of New York with accurate time. Should the proposal meet your approbation, it would be our pride and pleasure, *from and after the day of the Inauguration of the Dudley Observatory*, to give accurate time to your city, within the fraction of a second, by the dropping of a time ball."

From the letter to the Mayor of New York, signed by Gen. Van Rensselaer, (President) Mr. Olcott, (V. President) and countersigned by Prof. Bache and myself in behalf of the Scientific Council.

ALBANY, January 22, 1856.

"The great commercial port of New York not merely has no precise time-signal for the regulation of chronometers, but is dependent upon private resources for knowledge of the time by which its clocks are to be regulated.

The Trustees of the Dudley Observatory, which has been erected in the city of Albany, and is to commence its activity in August next, are earnestly desirous of rendering its scientific investigations as serviceable as may be to the commercial and material interests of the State. And they beg leave to express to your Honor, the pleasure which it will afford them to furnish the city of New York with accurate time.

For this purpose we have the pleasure of offering to give the time, accurate to the tenth of a second, to the shipping in the harbor of New York, by dropping a large, conspicuous ball or giving some equivalent signal in one or more positions in the city; and secondly to regulate any three clocks which the city government may see fit to select, by means of the same telegraphic circuit.

The necessary annual expense will be confined to the small sum needed for the care of the apparatus half an hour daily, and for the renewal of the batteries from time to time. The Observatory asks for no remuneration, and the requisite apparatus will be far from costly. Should this proposal meet with your approbation and be acceptable to the authorities of the city of New York, it will be our pride and pleasure to contribute our share towards putting the plan into operation from and after the day of Inauguration of the Dudley Observatory in August next."

The motive of the mutilation is evident. The proposal was conditional, and the condition was never fulfilled. But the Accusers omit whatever alludes to the conditions, and supply language of their own to fill out the sentences.

16. *Expectations of the Trustees.*

Nearly a page is devoted by the Accusers to a description of the "false hopes" on which I had fed "the Trustees," and the broken promises with which I had deceived them. This is a favorite theme with Mr. Olcott and his coadjutors, for it conveys the idea of long suffering, until forbearance was no longer endurable. How much truth there may be in this oft-repeated and still oftener implied assertion, will be understood by those whose love of Justice may prompt, and whose patience may permit, them to read one-half of this exposure of the long catalogue of infamous,

flagrant and malicious accusations and slanders from which I am called upon to vindicate myself,—at the expense of time, energy and powers that might have been devoted to my chosen science.

The reader is well aware by this time that, in the dialect of the Accusers, "the Trustees" generally signifies either Mr. Olcott or Dr. Armsby; that, if these are men of ordinary capacity and sense, they could not have believed what the "Statement" asserts on page 18 they did believe; and that the vivid word-painting with which the fertile ingenuity of the Author or Authors has decorated the "Statement" belongs to the class of imaginative composition, rather than to the historical department. Were the subject a less serious one, it might excite a smile to think of "the dropping time-ball in every great city on the continent," announcing the *midnight* hour!

17. *Quotations on page* 14.

Two alleged quotations are given in the "Statement," on page 14;—one of them containing a sentence italicized throughout to correspond with the introductory remark about "the following characteristic terms." Both extracts are mutilated, and both are given in such a way and such a connection as to distort their original meaning.

The first is from a letter written by me, 1856, January 6,—not to "the Trustees," but to my (then) friend Dr. Armsby. I had been informed that a person of much note was annoyed at the prominence which the regulation of time for New York City would give the Dudley Observatory, and that strong efforts were made to prevent the acceptance of our plan by the Common Council. And my short acquaintance with Dr. Armsby had already shown me, that he was not much in the habit of keeping either his own counsel or that of others. I may here mention, too, that Messrs. Olcott and Harris would be somewhat surprised did they know how constantly such of their recent plans and counsels as have been confided to this loquacious man have shared the fate of all my former communications to him, and found their way most accurately to the very place to which they should not have gone.

In the letter alluded to, I therefore endeavored to caution Dr. Armsby against his excessive talkativeness and boastfulness; and suggested, as a matter of common sense, that it would not be well to suspect others of jealousy, nor yet to afford an opportunity for any one to thwart our plans in case such jealousy did really exist. And in the unconstrained style of private correspondence, I intimated my hope that the thing would not be talked about till every arrangement for the apparatus was completed, even to the setting of the trigger.

As the same letter contains another passage cited by the Accusers, at the bottom of page 16, I will here give the most of it, side by side, with the two garbled extracts:

What the Accusers say—"Statement" page 16.

He also writes: "Since I saw you, I have ordered one Chronograph and clock, and given direction for estimates and plans for two other Chronographs, the dial for the sidereal and the mean time clock, the adjustment to regulate railroad and other clocks on the circuits, the observing keys and the time ball."

"Statement," page 14—First Extract.

In his letter to the Trustees, promising a "time" revenue to the Observatory, to commence immediately after the Inauguration, Dr. Gould took occasion to caution them against making his plans too public, in the following characteristic terms:

"It is not well to suspect the possibility that New York could wish to have the time elsewhere than at her own capital; *but do be cautious how the thing is talked of publicly until the trigger is ready to be pulled.*"

What I wrote to Dr. Armsby, Jan. 12, 1856.

"As for what is to come next I dare not anticipate the future. I am ready and cheerfully happy to go on with the equipment and organization of the Observatory; and in the spring will propose a plan for its laws and regulations. Meantime, since I saw you, I have *ordered* one Chronograph and the "Corning" clock, and given directions for estimates and plans for two other chronographs, the dials for the sidereal and the mean time clocks, the adjustments to regulate railroad and other clocks on the circuits, the observing keys, and the time ball; or, what may perhaps be even better, the falling of four arms. If when all is done, I beg you to let me relinquish the directorship to some one else, (and I can name others quite as good) you know that you are not to blame me. . . .

I have replied by this mail that I do not propose to appear in the premises, but that you Albany people will watch developments. Of course it is not well to suspect the possibility of any one being jealous; or that New York would have the time elsewhere than from her own capital. But do be cautious how the thing is talked of publicly, until the trigger is ready to be pulled.

Bache will be at your disposal Jan. 18; but I would strongly recommend a deliberate discussion of policy with him on the 17th. . . . . I will be there myself also, but beg you in advance to let me be a looker on,—or at most to have a voice in council, without taking any active, conspicuous part."

Passing now to the Second quotation on page 14, its motive will be readily recognized. The Accusers desire to represent me as alluding to this same matter of time *to New York City*; as expressing myself with certainty, or, as they call it, "*promising;*"—and as being the *responsible* person. Let a true extract speak for itself. The capitals mark important words:

What the Accusers say, p. 14.

As if to keep the same delusive vision of a "time" revenue before the minds of the Trustees, Dr. Gould again, writing from Mobile, under date of February 4, 1856, says:

"There is no reason why all the clocks in the city should not form a circuit for themselves, independent, and be strictly sympathetic."

What I wrote to Dr. Armsby, 1856, Feb. 4.

I believe we did not speak again concerning the furnishing of time to the CITY OF ALBANY. YOU have probably not allowed the clocks in the Capitol and the State Library to escape YOUR memory. In estimating the expense, I suppose YOU will not omit to bear in mind that a short piece of line will have to be built. There is no reason THAT I SEE NOW, why all the clocks in the city should not form a circuit for themselves independently and be strictly sympathetic, i.e. not ordinary clocks adjusted from time to time BY THE CORNING CLOCK, but pieces of mechanism driven entirely by the galvanic circuit, and beating synchronously with the motor clock in the Observatory.

The bold falsehood about a revenue from furnishing time to the cities will be apparent.

18. *Employment of Mr. Spencer.*

Upon pages 14 and 15 of the "Statement" is the remark:

"Accordingly, when, upon his return from Europe, he informed them that he had not contracted for a Heliometer there, and submitted the proposition that Mr. Spencer should be employed to construct the instrument, the Trustees cheerfully assented," &c.,&c.

The "accordingly" here set down represents the Trustees as being beguiled and influenced to a certain act *in January*, by a "delusive vision" which I put before them a month later—*in February!*

An effort is made by the Accusers, throughout the second as throughout the first attack, to make *me* responsible for Mr. Spencer's non-completion of the Heliometer. This point, and some accompanying ones, are disposed of elsewhere. Moreover, the five lines following the sentence I have quoted contain two direct falsehoods, and four more by implication; but these have been disposed of elsewhere, and I do not dwell on them here.

Mr. Spencer is alluded to as if he were some unknown friend of mine, for whom I desired to obtain a job. Yet I never saw him until Jan., 1856, after my return from Europe, and visited him then at the earnest instance of Dr. Armsby. I will confess that prejudices had been raised against him in my mind by the absurd claims of Dr. Armsby in his behalf—but an inspection of the magnificent 13-inch equatorial then nearly completed by him, and a conversation of some few hours upon astronomical instruments, showed me that Astronomy had as much to hope from his telescopes, as Natu-

ral History had already profited by his microscopes. My only hesitation as to the propriety of the order being given him, arose from doubts as to his possession of the necessary means. These doubts were overruled by Mr. Olcott; and in a conference with him and Dr. Armsby, an hour before the assembly at Mrs. Dudley's, ("Statement," p. 15) it was unanimously decided to award the construction to him. Mr. Spencer had not expected such a result, and was not aware of it until two days later. As for myself, it was with no small satisfaction that I believed we had won a new Fraunhofer for the service of Astronomy.

Mr. Spencer himself wrote to Dr. Armsby, 1856, Jan. 14:

"Dr. Gould's remarks were to me as unexpected as gratifying. Indeed, I was satisfied that the Dr. would insist upon sending the order to Repsold; and had made up my own mind to yield the point, rather than run counter to what I supposed his strong conviction."

To show how persistent had been the previous appeals of Dr. Armsby, I cite a few passages from his letters,—the first five of them having been addressed to me, in Europe.

1855, Sept. 30. "Prof. Eaton, the partner of Spencer of Canastota, called on me yesterday to complain of our sending to Europe for all the instruments, without ever inquiring as to their ability to fill the orders. He says they are going to build a Heliometer and have it finished before ours is done."

1855, Nov. 6. "In my last, or the previous one, I mentioned my conversation with Prof. Eaton in regard to the Heliometer, without attaching much importance to his remarks. I agree entirely with you that it would not have done to trust Spencer with any of the orders, however grateful to our national pride such an achievement as he hopes to accomplish might have been. Spencer has a new idea, as I understand. It is to convert his new Equatorial into a Heliometer; or so to mount it that it can be used for either, by simply changing the object glasses."

1855, Nov. 12. "I shall do my best to have Spencer's establishment removed to Albany. I mentioned in my last that Spencer proposed to construct his Equatorial so that it could be used as a Heliometer. Is this possible?"

1855, Dec. 3. "Cannot the Heliometer also be built here?"

1855, Dec. 4. "I trust we can have both Heliometer and Equatorial completed by August next. S. and E. are anxious to put themselves under a bond of $10,000 to finish both by that time, and have them satisfactorily mounted. The information you will be able to give them on your return, I have no doubt will enable them to combine all the improvements you may desire. The dividing of the object-glass, by the means they have invented, is a trifling matter."

1855, Dec. 29. "Spencer and Eaton are very desirous to build the Heliometer, and will pledge themselves to have it completed before the meeting of the Association, if the order can be given immediately. They have a 10-inch, which they *can divide* and use for the purpose. . . . . He [Spencer] thinks a Heliometer can be built with a much larger object-glass, and is most anxious to engage at once in the work. He has just finished his great Equatorial for Hamilton College, for which he receives $10,000. They are burning with impatience to have you see and examine it. The object-glass is 13 inches clear diameter. . . . . Spencer has an idea, that he is anxious to test in regard to the Heliometer. . . . . He will lay his plan before you when you come to Albany.

How soon can you be in Albany? We must then run up to Canastota for a

day and see Spencer and Eaton, and then you will be able to decide in regard to the Heliometer. No time is to be lost in giving the order, if you think they can be trusted to build it, and if it is to be finished in August next. They feel confident in their ability to complete the instrument to your satisfaction, and will give any guarantee required for the faithful fulfilment of their contract, if the order is given them."

The assertion, that he could begin and complete a Heliometer in less than eight months, had naturally led me to distrust Mr. Spencer,—until, in January, 1856, he assured me that he had never held out any such inducement, and we found the statement attributable to the vivid and glowing imagination of the enthusiastic Armsby!

19. *Expedition of Messrs. Spencer and Gavit to Europe.*

I have elsewhere explained that the sum of $750 was added in each of the original estimates for the heliometer by Mr. Spencer, to cover the estimated expense of going to Europe to examine the Oxford heliometer and the principal workshops. This expedition was the condition, unanimously agreed on, upon which the construction of the Dudley Heliometer was awarded him. Mr. Gavit, who accompanied him, went as Agent of the Local Committee of the American Association, to present those invitations to prominent men of science abroad, in connection with which the Accusers have so sedulously endeavored to make me appear odious.

The falsity of the assertions of the Accusers upon these subjects, on pages 15 and 16 of their "Statement," will thus be evident without farther comment. They say also on these pages that,

"To reconcile the Trustees to this further expense, which seemed to them quite unnecessary, he stated . . . . that such were the peculiarities of Mr. Spencer, that a judicious companion might, to use his own language, '*prevent him from going off upon side issues.*'"

This alleged extract was of course inserted and italicised to create unkind feeling between myself and Mr. Spencer. Were my Accusers any others than the men they are, it would hardly be credited that the sentence which they have altered into these words was written *after* Mr. Gavit's expedition was decided upon,—and that it was as follows, the letter in which it occurs being marked "Private":

"It will be a capital thing for our friend Gavit to accompany Spencer. Caution him to keep Spencer from going off on side ideas."

The talk about "hesitation" and "reluctance" is a fiction of the writer of the paragraph. The Local Committee of the Association, not the Trustees of the Observatory, sent Mr. Gavit to Europe. [See Appendix.]

In the two paragraphs here examined concerning Mr. Spencer and Mr. Gavit, there are six deliberate, point-blank falsehoods. My heart sickens with them, and I pass on.

20. *Invitations to the Inauguration.*

The greater part of page 17 of the "Statement" is devoted to an attempt to excite prejudice against me, as having made efforts for "the exclusion" of certain persons "from the Inauguration." Probably no one point has been more harped upon than this; for these men, in the narrowness of their souls, supposed that every person not invited to the inauguration-ceremonies would look upon me as the cause of the "exclusion." If so I must be truly an unfortunate man; for to the best of my knowledge *no special invitations were issued*, except certain cards of nominal admission distributed by Dr. Armsby and Mr. Olcott for a day or two previous. In the invitations to the meeting of the American Association for the Advancement of Science, whose session was held in Albany in August, 1856, during the week previous to the Inauguration, and closed only a few hours before the Observatory addresses in the great tent, it was mentioned that the new Geological Hall and the Dudley Observatory would be "inaugurated" during the week;—and these invitations besides being sent to every one of the members of the Association, were widely circulated, and special ones distributed to eminent Europeans.

Let me quote:

From the "Statement of the Trustees," page 17.

Much attention was also given by Dr. Gould, at this time, to efforts to make the Inauguration ceremonies at which the great instruments were to be exhibited, and the time from the Observatory sent forth to all parts of the State, an entire success. Even the character of the parties invited to be present, engaged his attention. On the 23d of March he wrote to the Trustees cautioning them to

"weigh all the names of the parties invited, carefully, in order to avoid diminishing the honor of the invitations, by affording them to second or third rate people."

What I wrote to Dr. Armsby, New Orleans, 1856, March 23.

It strikes me, if you in Albany approve, that beside the list of astronomers, Hall, Dana and Agassiz, as also perhaps others, such as Bache, Peirce, Gibbs, be invited to propose one or two names;—that we weigh these names carefully, to avoid diminishing the honor of the invitations by affording them to second or third rate people also; and then draw up a neat and pretty invitation, to be issued in the name of the Local Committee, and countersigned by the officers of the association or not, as you may prefer. Perhaps the Dudley Obs. would like to send some in its own name also. In three weeks I will be with you in Albany, if desirable,—even before I return home,—and we can then finish up the matter neatly and handsomely. It is rather late, I know, but perhaps the advantages to be derived from deliberateness will compensate, and having heard from the representatives of other departments of learning, we can distribute these unquestionably highly honorable and flattering invitations with discrimination,—which if so small a number of invitations are issued, becomes an ex-

tremely important element. Meantime I will do my best to draw up a list, to be compared with the others you may have received.

Do ask S. and G. to let me hear from Berlin, of the progress of the transit and mer. circle.

The apparently incidental remark of the Accusers, that at this time

"The great instruments were to be exhibited, and the time from the Observatory sent forth to all parts of the State;"

will be noticed. Also the perversion,—in referring to the "Inauguration ceremonies" what was written about the Meeting of the Association. Also the garblings by which I am represented as *cautioning the Trustees* to weigh, &c., when I was writing about a "weighing" of scientific names by scientific men. Also the fact that the motive was to make me odious, and by the introduction of charges not bearing upon the main question. But there is much more which is not so readily perceived, and to which I must call attention.

The Tenth Annual Meeting of the American Association for the Advancement of Science was held at Albany in August, 1856. To render this meeting of the Association as attractive as possible, invitations were issued to prominent European scientists. The Ocean Steamship companies generously offered to the Association fourteen free passages. The number of available invitations being thus limited, it of course became necessary to exercise some discretion in selecting the persons to be invited. I was myself General Secretary of the Association, Dr. Armsby being a Secretary of the Local Committee of citizens; thence my correspondence with him upon the subject. With this simple explanation I ask the reader to look back at the extracts, from my real letter, and from the "Statement" of the Accusers, given above.

"Efforts to make the Inauguration ceremonies" "an entire success," would have deserved the commendation,—not the censure,—of these conscientious and honorable Trustees. But they speak of them with a sneer, as though they were disreputable; and go on to say "Even the character of the parties invited," &c.,—and just below, continue "Nor was his anxiety for the success of the Observatory, confined to the exclusion," &c., &c.

Now, astonishing as it may appear to the reader, I devoted no attention whatever, in advance, to these "Inauguration-ceremonies." Mr. Olcott and Dr. Armsby well know that I was not in favor of them; and that—although I did what I could to aid, after the "ceremonies" were decided on,—the part I took was a very insignificant one. Even the remarks which I made on the occasion, and which are printed in the pamphlet, ["the Trustees" have taken a few "liberties" with them in the recent edition,]

were only prepared on the day when they were delivered. The parade and public demonstration, which seems inseparable from anything with which the names of Olcott and Armsby are connected, were unpalatable to my taste, revolting to my feelings, grating to my nerves. A student recoils from all such pomp and display;—and it was only borne on my part, as an evil beyond avoidance.

But the Accusers give yet more falsified extracts;—worse than the preceding,—although the wicked trick may fail of its intended mischief after the true circumstances are once stated. What shall be said of the baseness of inserting in my letter a sentence not contained in it:—"Do not invite —— and ——," for the sake of sowing suspicion wherever believers in the assertions of these Accusers can be found?

From the "Statement of the Trustees," page 17.

Again on the 29th of March, he writes:

"Do not invite —— ——and —— —— * * * The invitations should be *select*, in order to make them *complimentary*. A scientific man, like an artist, is sensitive: and the inviting a single man of the wrong kind, while one of the right kind is omitted, might destroy half the charm of the whole affair. To hear that the invitation, which should be a high honor to him, had gone to Mr. Jones, or Mr. Smith, would do much harm."

Nor was his anxiety for the success of the Observatory, confined to the exclusion of those "second and third-rate men," Messrs. Smith and Jones, from the Inauguration. Having learned, that Messrs. Spencer and Gavit's departure for Europe had been delayed, he expressed much concern, and wrote:

"I will not believe it possible that Spencer should not go just at the last moment. Certainly he ought not to undertake the Heliometer without having visited the European instruments, and he needs Gavit's companionship."

What I wrote to Dr. Armsby, Montgomery, (Ala.) March 29, 1856.

It is too late for this to reach you before Spencer and Gavit will have sailed, for I will not believe it possible that Spencer should not go, just at the last moment. Certainly he ought not to undertake the Heliometer, without having visited the European instruments. And he needs Gavit's companionship. I trust that if S. be delayed, G. will have delayed his departure also.

My letter will before this have reached you, in which I laid stress on the circumstance that the invitations should be *select*, in order to make them complimentary. Cannot a line be sent to Gavit, if he have sailed when this arrives, telling him to wait on arriving, before distributing the invitations, until he shall have heard from home again. I will try to be with you in the course of a fortnight, even before going home. You know that scientific men, like artists, are sensitive, and the inviting a single man of the wrong kind, while any of the right kind are omitted, might destroy half the charm of the whole affair.

. . . . . .

All this must be smoothed over, and I think it can be, but it requires discretion, and delicacy; and to hear that the invitation, which should be a high honor to him,* has gone to Mr. Smith or Mr. Jones, would do much harm. Therefore I think I will telegraph you from Macon, where I shall be tomorrow morning, asking you to delay the presentation of the invitations, until G., on arriving in England, shall have heard from you.

* An eminent European scientist, named in my letter, was here referred to.

It will be evident to all, that this was no official correspondence, but a private and highly confidential discussion. It pertained, not to the Inauguration, but to the meeting of the Association. The letter was not written "to the Trustees," but to Dr. Armsby, the Secretary of the Local Committee, by the General Secretary of the Association,—and I see nothing to regret in it, excepting that I could ever have written anything to such a person. The fabrication of the words "Do not invite —— and ——," is not "*moral* forgery!" It is REAL forgery, though not the crime of that name which the statutes define; it is a crime, nevertheless,—although one which the law does not reach, and a Judge of the Supreme Court has therefore not hesitated to——give it the sanction of his name, at least.*

Let the reader take this calumny in regard to "invitations to the Inauguration,"—manufactured, by additions and suppressions, from a correspondence relating to a different matter;—and compare it with the declarations of its authors upon pages 163 and 164 of their so-called "Statement:"

"But in this statement, the Trustees have thought fit to confine themselves to matters relating directly to the Dudley Observatory, and have availed themselves only of such letters as are strictly of an official character, carefully abstaining from all reference to such as might by any possibility, be regarded as confidential."

But I have something yet to add.

Dr. Armsby had repeated and urgently called upon me to nominate the recipients of the fourteen invitations. As may be seen even from the extract from my letter here given, I declined doing this, but readily agreed to join with others in "drawing up a list" and "weighing the names carefully." And I may add that from the list finally decided on, many were excluded whom, both on account of their eminence, and for the credit of those responsible for the selection, I earnestly desired to see invited. But as soon as others were found ready and willing to assume the responsibility, I withdrew from it, as abundant evidence exists to prove. And when Dr. Armsby brought out one proposition, better adapted even than any of its predecessors to make us ridiculous abroad, I wrote him:

1856, May 12. "As regards the distribution of the others [*the free passag s*] you will forgive me for suggesting that if the thing is to be a compliment, it ought not to be accessible by solicitation of the parties concerned,—

* I am informed, on good authority, that Dr Armsby has secretly told more than one of my friends that his name filled this blank! Yet the only language *in any way resembling it*, which I ever wrote any of these men, was on a very different occasion, in reply to some queries as to the propriety of soliciting certain gentlemen to form a business co-partnership with a friend of ours, in Albany. The proposition struck me as absurd and I replied "Don't ask ——." And I added (on account of other matters) "Please throw this into the fire as soon as you have read it."

either personal or second hand *via* their friends. To attend the meeting, no invitation is requisite; and it would be a source of great mortification to me to remember how many excellent people and dear friends I omitted from conscientious scruples,—when, after all, they were mountain-high above such people as those whose names are sent you."

The last of the three quotations in the "Statement," upon this subject has no bearing upon the questions ostensibly at issue; but is inserted for some not very well defined purpose of enforcing the implied theory that I was meddling beyond my province. "Having learned," they say,

"That Messrs. Spencer and Gavit's departure for Europe had been delayed, he expressed much concern, and wrote," &c.

The amount of concern expressed is easily measured, for it is all in the true extract, as given above from my letter of March 29. Whether there was ground for "concern" may be readily decided after reading the following extracts from letters of Dr. Armsby:

1856, Jan. 9. "I shall do my best to get Spencer off to Europe this winter, so that he may be ready to commence on our instrument as soon as the new building for workshops is completed."

Jan. 16. "If Spencer comes down, I hope you will get him to leave a rough estimate for the Heliometer on his way home. When Mr. Olcott has this estimate he will call on Mrs. Dudley and get her check for the amount."

Jan. 28. "Gavit has decided to go to Europe with Spencer, and is making his arrangements to start as soon as S. can leave."

Jan. 30. "Gavit is getting ready to accompany Spencer to Europe. He is the best person to go."

Feb. 22. "Spencer and Gavit are to leave the first week in March. They could not get ready sooner."

March 2. "Gavit and Spencer, I am sorry to say, have not yet started, but hope to in a few days. The difficulty in arranging business so suddenly has hitherto prevented."

March 7. "Spencer and Gavit are to sail in the Baltic on the 15th inst."

March 10. "Spencer and Gavit, who are to sail, we hope, on the 15th. It is possible they may be delayed until the 1st of April."

March 12. "Spencer has been delayed on account of the Equatorial for Hamilton College. He wants also to take out a microscope, &c."

March 15. "He [Mr. Gavit] will not sail before the 2d of April by the Persia, and it is possible Spencer may not accompany him, but I think he will. At all events *Gavit will go*, as the agent of the Local Committee of the Association, to present the invitations in person. . . . . Do not be alarmed at the possibility of Spencer's delay."

(My letter of March 29, quoted above, was in response to this last letter of Dr. Armsby.)

March 22. "In my last I suggested that possibly Spencer might not be able to accompany Gavit. It will all be arranged so that he can go with G., I have no doubt on the 2d of April."

April 5. "Spencer and Gavit will be ready to sail on the 15th, if nothing should occur to prevent. They have been unavoidably detained."

April 8. "Spencer and Gavit are to sail in the Asia on the 16th (Wednesday of next week)."

21. *Quotations on page* 18.

I need not dwell on these, farther than to show their falsification and to exhibit the motive.

The falsification of the first two has been already exhibited on page 29.

The substitution of the word "*architecture*" for "*architectural drawing*" is in order to make me acknowledge my ignorance of a matter upon which it is alleged I am assuming responsibility, and in order to give significance to the falsification in the quotation next following.

The motives of the very bare-faced alterations of the second scarcely require explanation. First, I must be made to approve the plan for alteration of the building, which, in fact, I disapproved. Secondly, I must be represented as extravagant, with which theory the true letter would tend to conflict. Thirdly, the fabricated clause about "altering the *two* wings," (in which, as in other quotations, the authors italicised one of the inserted words,) is to make me favor the alterations of the west wing, which I strongly opposed until it was beyond prevention.

The third quotation I append. It was prepared by inserting the words "*of course*," and omitting the word "*certainly*," by which latter change the meaning of the entire sentence is reversed. The closing sentence of the paragraph would "of course" have contradicted this new meaning. The coarse indelicacy of thus needlessly bringing forward the name of an estimable gentleman is self-evident.

From the "Statement of the Trustees," page 18.

On the 28th of April, Dr. Gould, still holding out the expectation that the Observatory would be in working order by the end of August, writihg from Cambridge, says:

"I have received a letter from Prof. P. P. Brown, who wants to be assistant at the Dudley Observatory, and propose, of course, to refer him to you, after informing him that the Observatory will not commence its activity before the last of August."

What I wrote to Dr. Armsby, 1858, *April* 28.

I have received a letter from Prof. P. P. Brown, who wants to be assistant at the Dudley Observatory, and propose to refer him to you after informing him that the Observatory will certainly not commence its activity before the end of August. Counting chickens is doubtless a praiseworthy occupation, but requires discretion as regards the stage of their development.

There is still another quotation on page 18 of the "Statement" about a derrick,—also somewhat altered,—but this is unimportant except in connection with the "ingenious crane." The words "*can be obtained*" are substituted for "*could be used*," in order to give effect to the subsequent declaration of these Accusers that any ordinary apparatus would have answered the purpose.

22. *Quotations on pages* 19 *and* 20.

On these two pages there are six alleged extracts from my letters, beside sundry phrases so placed in quotation-marks as to attribute them

to me. Every one of the extracts is falsified,—some very wickedly;—and most of them convey, either directly or indirectly, some untruthful impression.

The assertion that I stated that "the time-ball matter" "hangs on account of the inactivity of Mr. Blunt" I pronounce a slanderous falsehood. I never said so. The motive here, like that in Mr. Olcott's first attack, where he falsely alleged that I treated a valuable gift of Mr. Blunt's with scorn, is palpable.—"Blessed are the peacemakers!"

The mutilations on page 19 are great. The one exposed on p. 30 of this Reply will suffice as a specimen.

The distortion is manifest. The letter goes on to speak of sending Dr. Peters,—a man concerning whom it says "I have only hesitated, on the matter of policy a little." The views and apprehensions there expressed, and conformity to which was neglected in consequence of my kindly feelings towards the man, have now a vivid significance when compared with the illustrations of their correctness furnished since that time by Messrs. Peters and Brünnow.

And, finally, the letter concludes with the request *that it be burned!*

At the top of page 20 of their "Statement," the Accusers give an extract about the inscription upon the Meridian-circle. It is not correctly given, but the changes are comparatively unimportant. The closing sentence of the paragraph is omitted. It was:—"If Mr. Olcott is to *give* it, this ought to be put, *Presented by T. W. Olcott.*" Mr. Olcott did not give it; and the words "presented by" were not inscribed upon it, although he now claims the merit of having presented it! [See also § 10].

The other citation on this page relates to what the Accusers call "experimental chronographs." One of their favorite accusations is that I allowed money to be spent in experiments upon chronographs. This charge occurs not only in several places in the "Statement," but also in the First Attack. Had expense been thus incurred, I hold that it would have been not only legitimate but laudable; but not a dollar was thus brought to the charge of the Observatory! Had the Accusers felt that their graver charges could be substantiated, they would have been under no necessity of fabricating one so trivial. I give the quotation,—in which it will be seen that the word "*experiments*" is substituted for the words "*to progress*," in order to furnish a basis for this paltry accusation.

From the "Statement" of the Accusers, p. 20.

On the 10th of July, Dr. Gould first writes that his plans for experimental chronographs do not work quite satisfactorily. He says:

What I wrote to Dr. Armsby, 1856, July 10.

"This afternoon I shall drive over to Roxbury, as I generally do twice a week, to look after the progress of the chronographs. I was more sanguine o

"I was more sanguine of their brilliant success, a fortnight ago, than I am now; but while we are trying experiments, we take care to put a peg through all that we have already secured."

their brilliant success a fortnight ago than I am now; but while we are trying to progress, we take care to put a peg through all that we have already secured."

In his First Attack, Mr. Olcott said,

"Dr. Gould contracted a debt for Chronographs and Clocks not immediately wanted, costing nearly $1200, a good share of which sum I understood was lost in experiments."

And besides the allusion in the passage just cited from page 20 of the Second Attack, one of the sins imputed to me on page 52 is the "ordering experimental instruments." On page 138 a grand tirade upon the subject also occurs,—upon a text which contains three misstatements in five lines.

The basis and the evidence of this charge, so often repeated, are contained in the falsification just exposed,—the simple substitution of the word "*experiments*," for the words "*to progress*," in a private letter to Dr. Armsby.

23. *Encomiums upon Peters;*

One page is here devoted by the Accusers to an account of Dr. Peters; this with the next one forming two pages whose equals for all that constitutes mendacity, whether in quantity or quality, can probably not be matched in the English language.

They begin by saying:

"About this time, Dr. C. H. F. Peters, an eminent practical astronomer, arrived in Albany. He had been detailed to the Observatory, by the Superintendent of the Coast Survey, in whose employ he then was."

Dr. Peters is now discovered to have been "an eminent practical astronomer, while "Dr. Gould's views were *theoretical* only," and "he was without *practical experience*." On this subject, I beg to refer to § 7 of the "Defence" by the Scientific Council.

Dr. Peters was detailed, not by the Superintendent, but by me, to come to Albany; and after considerable correspondence upon the subject.

The "Statement" next says, that "his arrival was hailed with much satisfaction by the Trustees, to whom the continued absence of Dr. Gould had been a source of much regret and embarrassment." Regret and embarrassment at my continued absence, at a time when they no more expected my presence in Albany, as even a temporary resident, than they expected that of the Astronomer Royal of England! See the three quotations from Prof. Bache's letters on this subject, pages 28, 29. No, I sent Dr. Peters to Albany to attend to certain official work, and the only duty he was to perform, which had any bearing on my relations with the Trus-

tees, was that of looking after the constructions in progress,—to prevent, if possible, mischievous and fatal departures from proper plans; nor did they know him officially, otherwise than through me, until the culmination, in December, 1857, of his intrigue with Mr. Olcott and Dr. Armsby. He had nothing to do with astronomical work for the Observatory, nor did he do any such work, except, at my suggestion, in the occasional voluntary use of the comet-seeker.

The Accusers say that I called Dr. Peters a man of "vast experience, practical ability, and great genius." I am certain that I never applied such language to him. I have written of him in terms of commendation, especially at the time when, in Nov., 1856, Dr. Armsby applied to me to recall him, and put an American in his place. But I never spoke of him in the terms attributed to me.

The statement on page 21, as to the offer made him by Lieut. Gilliss, is likewise untrue in many respects. The offer alluded to was made by Lieut. Gilliss through me, at my recommendation, and after Peters had been stationed in Albany. The statement that "Dr. Peters had been employed in aid of Dr. Gould," in Lieut. Gilliss's work upon the Chilian expedition, is a distortion of the simple fact that—in my investigation of the Solar Parallax from Lieut. Gilliss's observations, made at the request of this distinguished astronomer, and by appointment from the Navy Department—I had personally hired Dr. Peters to perform certain calculations. I paid him from my private means, at a rate double what it was my custom to give others for the same kind of work, in which I frequently employed students of the university. My motive was to aid and befriend him as delicately as I knew how, being aware that his salary of $540 a year from the Coast Survey was scarcely sufficient to support him.

The "three assistants," spoken of in this connection, is "poetry."

24. *The Piers.*

It is untrue that, as stated on page 21 of the "Statement,"

> "Throughout June and July, the work at the Observatory was delayed through the necessity of transmitting plans to Cambridge or Washington, and especially because of the difficulty in deciding upon the sort of piers to be obtained."

No plans were sent to Washington, nor was the work delayed by the necessity for transmission. But even had it been so, it would furnish no ground for finding fault with me. If I toiled for the institution gratuitously, it was enough, and Cambridge may be reached from Albany in nine hours; I have made the trip in seven hours and a half.

The material for the piers was, it is true, a subject of long, careful and laborious investigation; but it was decided on previous to the time at

which the Accusers say the "difficulty in deciding" delayed the work. No delay occurred on this account, and if any occurred on account of selecting the quarry, (an assertion which I find myself without present means of disproving, but which I believe to be untrue,) it was certainly not chargeable to me.

That "Dr. Gould desired to have the largest stone piers in the world, irrespective of cost," is an assertion as ridiculous to an astronomer, as it is untrue,—since the dimensions of the piers in height, breadth, and thickness were, by the very structure of this meridian-circle, prescribed by the dimensions of the instrument, except for the part near the base, where they were prescribed by the dimensions of the foundation, which was certainly too small. "The largest in the world" is a phrase which smacks more of Dr. Armsby than of the chief author of the "Statement."

"The Trustees" "sometimes considered those [i. e. my] views peculiar!" The Accusers now say they had not at the time assumed the position of astronomical critics, and the information therefore reaches me now for the first time.

At the bottom of page 21, and top of page 22, is a passage vainly intended to create unkind feeling between myself and my respected and esteemed friend, Professor Bartlett. That the printing of such an extract is a base betrayal of confidence, is self-evident. But it was not "Professor Bartlett's talk" which was "simply absurd." It was what Dr. Armsby in his want of comprehension said about it. After all the plans had been completed, the stones selected and all received, one of the two circle-piers rejected, for reasons hereafter to be given, and its substitute quarried out,—Dr. Armsby wrote to me, in November, certain alleged suggestions of that gentleman. What I erred in, was in not at once assuming the whole to be Dr. Armsby's version, and something very different from what Prof. Bartlett said. I am now aware that what he did say was not in suggestion at all, but in reply to the incessant questionings of Armsby.

The subject on p. 22 closes with the assertion that "annoying delay" occurred,—caused by their desire to follow my counsel, and due to my absence; that it was seriously felt by the Trustees, and much embarrassed their operations. To the charge of delay, which next to that of extravagance, is the one most dwelt upon, adhered to, and made plausible; I have very fully replied in Part I., Chap. VI. See also § 43 of Part II., p. 231.

25. *Prof. Bache's letter of August* 11, 1856.

The fraudulent perversion of the meaning of this letter, has already been exposed in Part First [page 34]. By the omission of three words and the change of one, the Accusers have succeeded in making a personal

letter;—written, at Mr. Olcott's request, for transmission with an official one, and suggesting the new appeal to Mrs. Dudley and the citizens of Albany, which was so successfully made, soon afterwards,—seem an appeal for a CHANGE OF NAME! The remarks prefixed to this extract (p. 22) are almost the basest in the whole volume. Look at them. The italics are mine:

"The *anxiety of Prof. Bache* to give!"
"to the Observatory in every respect a *national* character!"
"and to take from it all features of a *local* nature!"
"induced him to hint at a *change* of name!"
"'Dudley' was a simple *family* name!"
"'Albany' a comparatively *small* city!"
"Neither *suited his ambition!*"
"which was *of course* purely of a *patriotic, unselfish* character!"
"and overshadowed [his] sentiments of *personal gratitude* and esteem!"
"for the *lady whose name* it had taken!"
"and the *city whose liberality* had raised it up!"

What baseness, what infamy is this! Signed by seven members of Christian Churches, and one of them a Judge of the Supreme Court! Aimed at a man of whom, and whose colleagues, Mr. Olcott published the remark three months afterwards:

"These distinguished scientific gentlemen are laboring for this Institution from the most exalted devotion to the science and honor of their country, and with a disinterestedness which has deprived the Trustees of the pleasure o even reimbursing them their actual traveling expenses when engaged exclusively on business of the Observatory."

Upon the reception of the letters of Aug. 8, and 11, 1856, Mr. Olcott addressed me a note in which he said:

"I have received the letter from Professors Bache, Peirce and yourself. Prof. Bache would have preferred a previous consultation, but too readily yielded his judgement to my request. The fact is, that I wanted to make a secret but strong demonstration upon some of the merchant princes of New York, in perhaps the too sanguine hope of a result, which would be to you an agreeable surprise. But I have concluded to defer the movement, and I think it is wise to do so. You promise a *great deal* in your joint note; for the friends of the Observatory indulge in *glorious hopes*. But who can doubt, when their realization is vouched for by minds which have," &c., &c.

26. *Mrs. Dudley's Endowment.*

The noble contribution towards the endowment which was given by this honored lady, in August, 1856, and which is now threatened with utter sacrifice through the double ingratitude of Mr. Olcott,—who should have cherished with more than filial care the name it was intended to commemorate, and whose protestations of devotion to the solitary widow had been met by the one appeal alone that he would aid her in rearing a fit monument to her husband's memory—was obtained upon the presentation to Mrs. Dudley of the Council's letter of 1856, Aug. 8, (published in the Inauguration-Pamphlet), inclosed to Mr. Olcott by Prof. Bache in his letter of Aug. 11.

Mrs. Dudley, in her own letter announcing the gift, quotes a paragraph from this letter of the Council, and besides the quotation refers to the sum named by the Council as the minimum required for endowment, and to the guarantee of their names.

She says:

"Professors Bache, Peirce and Gould, state in a letter which I have been permitted to see, that to expand this Institution to the wants of American Science, and the honors of a National character, will require an investment which will yield annually not less than $10,000. And these gentlemen say, in the letter referred to:

'If the greatness of your giving can rise to this occasion, as it has to all our previous suggestions, with such unflinching magnanimity, we promise you our earnest and hearty co-operation, and stake our reputations that the scientific success shall fill up the measure of your hopes and anticipations.'

"For the attainment of an object so rich in scientific rewards and national glory, guaranteed by men with reputations," &c., "contributions should be general, and not confined to an individual or a place. For myself, I offer as my share of the required endowment the sum of $50,000 in addition," &c.;

and she then closes with the sentence which the Accusers have quoted, although incorrectly, on p. 23.

In the second letter of the Council, written 1856, Aug. 11, for use in New York city, they say

"The establishment is thus provided with means of world wide usefulness, if endowed so that its advantages may be employed to the full extent." "What is wanted to see this establishment permanently successful is shown in the annexed paper." "We would not see this admirable building and these costly instruments added to the list of those in our country which are lying fallow."

Yet, in the face of all this, the Accusers aver, on p. 126, that

"The Trustees cannot persuade themselves that a single dollar has been obtained for the Observatory, 'by the use of the name' or 'the pledge of the management' of the Scientific Council. Such is not the fact."

On p. 23 they declare

"This great gift was placed in the hands of Mr. Olcott, without the knowledge of any other person; but on the 26th of August, two days before the Inauguration, he deemed it proper to inform the gentlemen of the advisory Scientific Council, of the fact."

On pp. 125, 126, they assert:

"True, they had probably never seen Mrs. Dudley—the application for the donation was made by Mr. Olcott alone—the fact of her intention to make it was communicated to him alone—these gentlemen were just as ignorant of the fact as anybody else, until a few hours before the inauguration."

They say on p. 15:

"At a meeting of the friends of the Observatory, at the house of Mrs. Dudley, he (Dr. Gould) announced," &c., &c.

27. *The Inauguration.*

This celebration of the Observatory, which the "Statement" calls "one of those great events that constitute an era in its history" and of which they say,

"It was to occur at the time of the meeting of the American Association for the Advancement of Science, and to constitute its great feature of attraction,"

took place, 1856, Aug. 28, after the adjournment of the Association. It consisted of a eulogy upon Mr. Dudley by Ex-Governor Hunt; of sundry addresses pertaining to the Observatory; and of the great oration of Mr. Everett upon "The Uses of Astronomy." It occurred before the building was finished, or a single pier set,—or a single instrument received from the makers, excepting the Corning Clock and a comet-seeker. Nor had it been supposed that the building would be ready in season;—at least since the early spring, when it became manifest that it could not be. I had myself been opposed to any celebration, at least until there should be something to celebrate; but, being overruled, did whatever I properly could to gratify the love of pomp and show which characterised the Managers. And as the Corning clock was all we had, my friend Mr. Gavit took charge of the laying of a telegraphic wire from this clock to the place of meeting in a great tent at the park,—about a mile distant,—where it was connected with a sympathetic dial upon which the time was thus recorded on the platform of the tent. It has been already shown [page 55] how this simple endeavor of mine to gratify the love of display of Messrs. Olcott and Armsby, without derogating from the dignity of the occasion, has been made the basis of a charge of deception.

The whole of page 24 is devoted by the Accusers to the narration of their alleged woes and sorrows on that occasion. It affords the best display of rhetoric in the entire pamphlet. They speak of "reasons for sadness," "hopes unfulfilled," "expectations disappointed," "splendid promises made by Dr. Gould," "brilliant visions he had kept before their eyes!" They assert that "no marvelously constructed clock noiselessly recorded" the time "chimed forth from the belfries of the skies!" There was no "time-ball," and "no bond of ever-acting sympathy linked" clocks together! "No railroad station exhibited" "evidence that the trains" "were deriving their time from the Dudley Observatory!!" They say that the walls were open "to permit the working of the 'Ingenious Crane'"—although the plan for this now celebrated instrument was not even drawn, until afterward! They talk of "the glories of the model instruments" and "the brilliancy of the *fanciful*,"—of the "imposing ceremonies," and "the admiring eyes of millions."

Alas for rhetoric! It is only effective when truth is, or is supposed to be, its basis. Those who were then in Albany know whether the Trustees were despondent or were exultant. The instruments could not have been mounted had they arrived; their purpose is not to exhibit "unfolding glories," or "brilliant visions," but to make observations which may con-

tribute to our knowledge of the solemn simple laws of God, as recorded in the heavens. The clock was in the Observatory, and the "bond of ever-acting sympathy," (the telegraphic wire,) "linked" it with the dial in the tent. No "time ball" fell, because the offer of the daily signal had not been accepted. But I will not linger upon this trash. The labor of exposing such falsehoods and calumnies as are important, is itself enough.

Allusion has been already made to the care with which Messrs. Olcott and Armsby have culled and displayed every complimentary remark, made while their characters were so wrongly read by the Council. A page is here devoted to it, which I pass over,—hoping that my well-meant, but fatally erroneous, eulogiums may have done no serious harm to any but myself.

28. *The Heliometer.*

In the First Part, I have detailed the circumstances connected with the order for this instrument, and in § 18, page 197, yet more information on the subject will be found. The understatement by the Accusers of the amount really given by Mrs Dudley has been exposed in § 8.

On page 81, the "Statement" informs the reader "of $7000, advanced to Mr. Spencer on account of the heliometer, which is not yet begun." Yet, in a letter of 1857, April 9, Dr. Armsby wrote me concerning the advances to Mr. Spencer.

"We have now advanced as follows:" (Then a list amounting to $9,200.)

"The interest on these several sums will make it up $10,000 in six months more. This is a sad view of the case. But we must make the best of it and keep our fears to ourselves. If I could have had my way, I would never have advanced the $7,000 unless to a responsible firm, and I so urged, but was overruled."

And on the same day Mr. Olcott wrote me:

"We are now under advance to him of near $10,000."

My declaration, that the Trustees would never regret the order to Mr. Spencer, would be correct to-day, if Mr. Olcott, their representative, had done his duty and protected the interests committed to his trust. However discouraging the present prospects, I do not regret my share in the proceeding.

29. *The Corning Clock.*

On page 154 of the First Part of this Reply, and in § 11 of this Second Part, is abundant explanation of the simple matters over which the Accusers have endeavored to throw such a veil of obscurity. And Mr. Corning's own manly letter, published at the close of Mr. Thachet's "Key to the "Trustees' Statement," gives a plain narrative.

My own purpose here is to show distinctly that—not the sidereal or "normal" clock, which has not yet been received from Mr Krille—but the

mean-time clock, the pendulum and great dial of which are in the entrance hall, made by Mr. Farmer, and put up by him in the summer of 1856, is, and has been, exclusively known by the name of "CORNING CLOCK." I quote first from my own letters to Dr. Armsby:

1856, July 2. "The 'Corning Clock,' i.e., Dial, must be decided on quickly. How would it do to put it in the library facing the entrance? Or where?

July 3. "About the Corning clock we ought to decide now. You will remember that there are to be two clocks, each with its system of telegraphically regulated dials,—one showing sidereal time,—the other solar (or civil) time. The latter is what must be given to the R.R., so it will be best to call that *the* Corning Clock. Now I think that one of each of these dials should be in the library;—the "Corning" very handsome. What are your views?

Dr. Armsby's reply was as follows:

1856, July 4. "I would place the dial of the Corning Clock in the recess on the right of the center pier."

"There are four recesses in the wall, in the center large room, either of which might be occupied by the Corning Clock."

From this time forward, this name was uniformly given to the large clock for mean time,—although previously it may have been applied to both, indiscriminately, by Dr. Armsby. That I had myself applied the name only to this one, from the first, appears by the extract which the Accusers have so adroitly garbled, as shown in § 17, page 195.

In my remarks at the Inauguration, (pamphlet, pp. 29, 30,) will be found this sentence:

"Dials in every room will telegraphically record the time indicated by the normal clock imbedded in the massive pier below; while the Corning clock sends out the corresponding mean or civil time."

This same Corning Clock was then telegraphically connected with a dial on the platform near me, and on page 32 of the Inauguration-pamphlet will be found the sentence in which the Accusers, on page 27 of their "Statement," infamously charge me with untruthfulness.

"The clocks will be sending their mystic signals to all the dials, even as the Corning clock now ticks above my head."

The Accusing Trustees knew perfectly well that the mean-time clock at the Observatory was then, and since, known as the Corning Clock. They took no exception to my reference to it under this name at the Inauguration in August, 1856. But now, two years after I did so, they deliberately accuse me on this score of "a most unenviable indifference to truth." Compounding a felony is an indictable offence in morals as well as in law. The charge brought against me for my alleged want of truth, in this particular, is now made for the first time, though two years have elapsed since the offence is charged to have been committed, and though the Accusers must have been since then familiar with what they term the facts.

To aid in their attempted perversion the Authors of the pamphlet have prefixed this word "Corning" before "Clock" wherever they allude to the normal clock, as on pages 11, 15, and elsewhere; they have even done so on page 13 (at the bottom) in a connection which compels them to stultify themselves by talking as if they actually supposed that the

"Trains on every railroad centering in Albany, would govern their movements, and start from their every station, by the click of" a *sidereal* clock!!

30. *Mr. Olcott's Donation.*

Mr. Olcott states, page 27, that in September, 1856, he made a donation of $10,000. I was so informed by Dr. Armsby at the time; and, in a letter written soon after, expressed my admiration at such munificence, in language which is published in the "Statement," p. 27, in an altered form, as exhibiting what they call "expressions of *gratitude*."

It did seem to me to be a noble act of liberality to contribute so large a sum, and at a time when it was likely to be so thoroughly overshadowed by Mrs. Dudley's larger gift; and I gave utterance without stint, both in spoken and in written words, to the sentiments of respect which it engendered.

But what a contrast is presented by the reality! It is now understood that these "ten thousand dollars" were ten "*six per cent Bonds*" of the N. Y. Central Railroad, worth at the time exactly $8825. Mrs. Dudley asserts that, by declarations to the effect that others would not contribute handsomely unless he did so himself, and that his means did not permit this,—Mr. Olcott obtained very large subsidiary aid from her toward the ten thousand dollars, which he says he gave. Mr. Olcott was at the time Mrs. Dudley's financial agent, although he was soon afterward dismissed; and I am informed that even her check-books show that he received from her, as a gratuity, at or about this time moneys to the amount of $4000.

If even so much be demonstrable by documents, it will show a large falling off in Mr. Olcott's contribution. If not, it is at least capable of proof that he claimed then, and claims now, on p. 27 of the "Statement," which he has signed, and which he procured to be written, the credit of having made a donation of ten thousand dollars, when, in fact, he gave a much smaller sum; and he now insults his benefactress, and the widow of his benefactor, by publicly impeaching her capacity for business.

See page 93 of the "Statement," and § 107 of this Detailed Refutation.

31. *Quotations on pages* 28 and 29.

On these pages are three alleged extracts from three letters of Prof. Bache, relating to conferring upon me the official temporary charge or

directorship of the preparatory work and operations at the Observatory. It is needless for me to say that I never saw or knew of them until I saw them in the "Statement." But I will add that the suggestion they contain was repeatedly acted upon by the two managers, and declined by me, although I afterwards unsuccessfully made a short experiment.

There are three other alleged quotations, the mutilation of which I will here expose:

From the "Statement of the Trustees," p. 28.

On the 16th of September, Dr. Gould wrote to the Trustees that he had arranged for a youth, in the employ of the United States Coast Survey, to come to Albany to assist Dr. Peters. He says:

"The youth is *a mere boy—only seventeen*, or thereabouts—but ready to aid in any way he can, and so, I doubt not, will be of *some* service to Dr. Peters."

This "mere boy," only seventeen years of age, is one of the young gentlemen on the hill. He is now pronounced, after the lapse of two years, not only a finished astronomer, but to be over twenty-one years of age.

What I wrote to Dr. Armsby.

Ellsworth, Maine, 1856, Sept. 16.

Yesterday I sent letters to Dr. Peters and to one of the young men whom I had left at Cambridge,—authorising the latter to go to the aid of Dr. P. for a fortnight, in Albany, and asking the Dr. to arrange for his accommodation. The youth is a mere boy, only 17 or thereabouts, and ready to aid in any way he can,—so I doubt not that he will be of service to Dr. P.

The changes here are small, but effective; and illustrate the deliberation with which the alterations were planned and carried out, and the total want of moral scruple in their eminent author. "*And*" is changed into "*but*," and the word "*some*" is inserted and italicised! The motive is manifest; it elevates "Dr. Peters," and depreciates "the youth," who, as my associate, is the object of their dislike. It is also implied that the transfer of the latter to Albany was intended to be permanent, and was for aiding Dr. Peters in *Observatory work*, which is untrue. This is done to gratify the ambition of Dr. Peters, so frequently shown, to figure as a "chief" with "assistants under him."

The "youth" alluded to was Mr. Winslow, my friend and assistant for nearly four years. It is not true that he has been pronounced, by myself or by the Council, either a "finished astronomer" or "over twenty-one years of age;" but it is true that his attainments, zeal and conscientiousness, as well as his generous and unpaid devotion to the Observatory, entitle him to very different treatment from that which he has received from men double and treble his seniors in age, but greatly his inferiors in truthfulness, honesty, attainments and intellect.

The second of these quotations is the following:

From the "Statement of the Trustees," p. 28.

In reference to the location of the building, Dr. Gould wrote as follows:

"As for the *location* of the house, of course you will judge. My views were simply founded on personal opinion. Whatever you decide on, I will aid to the best of my ability. When you ask for my opinion, I give it without reserve, and without any intention of taking it amiss, if you decide otherwise."

What I wrote to Dr. Armsby.

Cambridge, 1856, *Oct.* 21.

As for the location of the house, of course you will judge, and my views were founded merely upon personal opinion of general principles. . . . . .

Do not understand me as opposing your wishes, my dear Doctor.—I almost thought from your last sentence that you did. Whatever you decide on, I will aid to the best of my power. When you ask me to give the results of my experience, I do it without reserve, without any intention of taking it amiss if you decide otherwise. But don't suppose that all these things have not been very thoroughly simmered over in my brains.

The two paragraphs in the second column above are from different parts and different pages of the real letter. The great mutilation cannot fail to be apparent at the first glance, as also the motive.

The third quotation is this:

From the "Statement of the Trustees," p. 29.

In October, Dr. Gould wrote to the President:

"Mr. Clark brought in his bill to-day for $250, for the comet seeker. I have approved it and sent it to you."

The bill was immediately paid.

What I wrote to Mr. Olcott, 1856, *Oct.* 16.

Mr. Clark brought in his bill to-day for $250 for the comet-seeker, and I have approved it and told him to send it to you. I suppose this was the proper course."

In a letter addressed to General Van Rensselaer, 1856, Oct. 25, Mr. Olcott applied to him to contribute an additional piece of land west of the Observatory. He wrote:

"The plans for Dr. Gould's house are drawn, and we want to decide upon its location on Monday if possible. And Dr. Gould prefers, and it is for the good of the Observatory that the house should be west of our present grounds. Dr. Gould is quite anxious on this subject."

This barefaced assertion was in the face of my continued and earnest recommendation, that the proposed house should be on the northeast. The house, which forms one of Mr. Olcott's "large buildings," of the picture, ($99) was another and earlier idea.

The palpable motive of the change here is to make me appear to be acting as a financial agent of "the Trustees." The letter was not to the President, but to Mr. Olcott, the letters to whom are quite as badly garbled as those to Dr. Armsby.

32. *The Professorship in Columbia College.*

This is among those charges brought against me by Mr. Olcott at the meeting of the Trustees, June 26, in order to form pretexts for the action

of the Board at that time, and which, though fully answered by the Scientific Council, have been reproduced by my Accusers in their "Statement" pp. 29, 147, without any allusion to this refutation. The accusation is that one of the reasons for my so-called delay in coming to Albany, was that I was a candidate for a "more lucrative" (!!) Professorship in Columbia College, which Mr. Olcott was pleased to call a rival institution. The Accusers take no notice whatever of the full refutation of the assertion given by the Council [Defence, § 6], but repeat the charge with unblushing effrontery ("Statement," p. 29). To give as much detail as possible, they even assert (p. 147) that the salary attached to the position in question, was $5000,—although no Professor in Columbia College receives, even now, a larger salary than $4000. At the time to which the Trustees refer the salaries were very much lower than at present, the available means of the College being then much smaller.

To nail this base coin once for all to the bank counter from which it issued, I give here a letter from the President of Columbia College, written in answer to one addressed to him by an intimate personal friend of mine, asking a point-blank question as to the matter at issue, between the Trustees and the Scientific Council.

President's Room, Columbia College:

NEW YORK, 10th Nov., 1858.

My Dear Sir—In answer to your inquiry, I state that Dr. Gould never directly or indirectly—so far as I have means of knowing—was an applicant for the Chair of Astronomy in this Institution, or any other Chair;—and if such application had been made, it must have been brought to my knowledge, either as member of the Board of Trustees of the College, or as the President of the College.

I am, dear Sir, yours very truly,

CHARLES KING,
President Columbia College.

Dr. WOLCOTT GIBBS.

Those who desire to learn more of this matter are referred to the "Defence of Dr. Gould by the Scientific Council." The Accusers do not think proper to bring forward the evidence upon which their assertion in regard to the Professorship is based. The inference is obvious.

To sum up the whole matter, I was never an applicant, and never knowingly a candidate, for any office, post, or professorship in any College or University on earth. Whatever invitations may have been given me in reference to such positions, have been given without application, direct or indirect, on my part. The time has never yet been when I was disposed to accept any offer of the kind, nor did I ever, except in a single instance, (long before I ever heard of the Dudley Observatory), take any one into serious consideration.

No invitation was ever tendered me by Columbia College, and no

application was ever made by me, or, so far as I am aware, by my friends, for any office under that institution. Even the incidents alluded to by the Council, in the passage above cited, took place without my knowledge. When I gave ear to the plausible persuasions of Dr. Armsby, I occupied a position and possessed a home, agreeable in every respect,—one which nothing, other than a sense of duty or an opportunity of much larger usefulness, could have induced me to change. These inducements came, as I thought; and I gave pledges, the fulfilment of which brought me to Albany.

The allusion to a "*more* lucrative position," as having tempted me to violate my duties, comes, apart from its total and known falsity, with a strange grace from men in behalf of whose institution I had labored gratuitously at large sacrifices of time, money and health, for three years.

33. *The Directorship.*

The three quotations from Prof. Bache's letters, given in the "Statement," pages 28 and 29, contain suggestions relative to conferring the full official charge of the preparatory work at the Observatory upon me; and I have briefly alluded to them in §31. Whether these alleged extracts are or are not correct, I do not know,—not having compared them with copies. These propositions were made without my knowledge or connivance, and it has been already stated that the full charge, or directorship, of the preparation and equipment of the Observatory, was frequently urged upon my acceptance, by Messrs. Olcott and Armsby, and accompanied by offers of salary, but declined. The apparent motive of my Accusers for inserting these extracts seems to have been to convey the idea that Prof. Bache, my friend and colleague in the Council and my superior officer in the Government service, was manœuvering in my behalf to secure for me a coveted position.

Prof. Bache was prompted in thus writing, as I am now aware, by the serious confusion and calamities which seemed to threaten the Observatory from the ill-judged and reckless management of Dr. Armsby,—who, while exercising the real control over matters of detail, and constantly disposed to act in opposition to my advice, could not with delicacy be restrained or overruled. I had appealed to him in a friendly way on numerous occasions, but as he always contrived to transfer the apparent blame to some other person, these appeals were fruitless. On two occasions I wrote confidential letters to Mr. Olcott, informing him of the embarrassments likely to be occasioned by his colleague's meddlesomeness and love of managing small affairs; and on one other occasion Professor Bache, meeting him in New York, also remonstrated with him orally at

my request. The two great troubles were the incurring of large expenses for purposes not desirable, and the continual interference (unknown until too late) with matured plans—in order to produce some scenic effect, or to gratify his, not very refined, taste and love of glare.

As to the matter of the permanent directorship I desire to place a few extracts from the documents of my assailants in juxtaposition.

On page 146 of their "Statement," the Accusers say:

"Upon this subject, his Defenders hold the following language:

'He (Dr. Gould) had given no pledge that he would permanently accept the office of Director previous to the completion of the endowment; *the only presumption* that he would accept it *after* that condition had been fulfilled, arose from the zeal he had manifested in the cause.'

In this statement the Trustees concur. Dr. Gould had not accepted the office of Director. It had not been tendered to him. He was under no obligations to accept it, nor were the Trustees under any obligations to confer it upon him."

Yet, as early as 1856, Oct. 27, Mr. Olcott writes me as follows:

"I embrace the occasion for handing inclosed, to say that my letter to —— was seed sown on good ground, and has taken root with a promise of harvest, but to what extent is not yet known. . . .

If Mr.——in the meantime writes him, it no doubt will add to the dimensions of your possessions as Director of the Dudley Observatory."

Mr. Olcott writes again, 1857, Jan. 6:

"The inclosed letter shows that astronomical science, though a child of the skies, has yet a sort of local habitation somewhere near Cambridge. Mr.—— from New Haven, says we must succeed and gain laurels, with you at our head."

And yet again, 1857, Oct. 1:

"We are willing to sink or swim with a Henry, a Peirce, a Bache and a Gould, as the only chance of immortalizing ourselves in this world. Therefore we submit this question to your decision. We hardly dare ask you to take up your residence at the Observatory, though we think it would insure our success."

It will be borne in mind by the reader, that this was written by Mr. Olcott *subsequent to all the alleged offences* on my part, which had made "the Trustees" determined, as Mr. Olcott *now* says, to "get rid" of me in January!

Finally, let me quote from Mr. Olcott's own Manifesto of 1858, June 26:

"Dr. Gould, our contemplated astronomer-in-chief, was behind no one in the manifestations of joyous anticipations. To him was confided the entire direction of affairs at the Observatory, to the minutest particulars appertaining to its alterations, erections, improvements and equipments."

And again:

"The Committee discovered in 1857 an unaccountable abatement of zeal on the part of Dr. Gould—not only a reluctance to come on and take charge of the Observatory, but a strange disposition to put off mounting the instruments and to delay progress in general."

How singular that a man, to whom the Direction had not been offered, (as the Accusers allege on page 146 of their "Statement,") should be blamed for manifesting such "reluctance to come on and take charge of the Observatory!"

34. *The Tabulating Engine.*

The true history of the calculating engine and its purchase for the Observatory has been given in the First Part, Chapter VI., § 8 [p. 137.] My duty is here only to expose the falsehoods of my Accusers. Page 30 of their "Statement," together with part of the preceding and following pages is devoted to an attempt to throw discredit upon me in this connection. That Mr. John F. Rathbone should have joined in the effort is most humiliating, and would be astonishing, were I not prepared for anything by the various lessons of this whole transaction.

My Accusers say (pages 29, 30):

"About this time,* Dr. Gould urged the Trustees to purchase a calculating machine."

"Neither Transit, Meridian-circle, Chronographs, Clocks or Dials, in all of which large investments had been already made, were received."

"Nothing was in working order."

"They could not always repress the regret and disappointment they felt, that, as yet, so little that was visible or practical, had been accomplished."

"Still, they retained their confidence in Dr. Gould, and gave their consent that he should purchase 'the calculating machine.'"

"Although the funds of the Observatory scarcely justified the expense."

What a display of untruthful assertions furnished by fourteen and a half consecutive lines of the "Statement!"

I *never* "urged" the purchase.

The chronograph and the Corning clock *had been* received at the time.

Both were in working order.

No "regret" or "disappointment," such as they allege, had *ever* been manifested, at least to me or to any member of the Scientific Council.

No "consent" was asked, and, therefore, it could not be "given."

The machine was a *special gift*.

I annex such evidence upon these points as has not been given elsewhere.

From a letter of Mr. Olcott, 1856, Oct. 31.

"Dr. Armsby is full of the calculating machine, about which you have written. I have said to him that with Rathbone's consent and your approval, we would risk diverting his $5000 from the general purposes of the Observatory, to this particular object. . . . . And if this machine will multiply his fame to a result equal to his merit, I would rather that *he* should have the credit of its purchase."

* October, 1856.

If the machine has not multiplied and tabulated his fame to an amount equal to the wishes of Mr. Rathbone's most ardent friends, it has not been my fault. How could he unite in this wicked attempt to destroy me?

From another letter of Mr. Olcott, 1856, Nov. 5.

"Mr. Rathbone consents to have his subscription apply to the purchase of the calculating engine, if you recommend it. I hope therefore that you have written for the refusal of it."

From a third letter of Mr. Olcott, 1856. Nov. 10.

"Why not make the purchase at once of the calculating machine? I would suggest that you authorise Mr. Babbage to do it, provided he can do so at the price named. Otherwise our negotiations, if known, may create competition."

From Letters of Dr. Armsby.

1856, Oct. 30. "I have received your letter and parcel relating to the Calculating machine. . . . . Mr Corning I have no doubt would purchase it, but he does not yet deserve the honor it would confer upon him. I called on him to-day, immediately on the receipt of your parcel, and enquired if he saw the machine in Paris. . . . . I said I desired to talk with him on the subject, when he was at leisure.

Would it not give eclat and honor to the Observatory, that would be worth more than its cost to us? I think it would. Is it the only machine of the kind in the world, except that of Babbage," &c., &c.?

1856, Nov. 4. "Mr. Olcott has communicated our decision, with regard to the calculating machine, to you. Since that time Mr. Rathbone has returned, and is willing to have his $5,000 thus directed, if we desire it."

1856, Nov. 4. "I would not delay action a moment in relation to the calculating machine."

The responsibility of having recommended this machine I willingly accept. As narrated on page 140, I desired that the nascent Observatory should signalize itself by the acquisition. I intentionally excited Dr. Armsby's interest on the subject by sending him information and documents which I procured for the purpose. But I left the proposition for the purchase to come from members of the Board of Trustees, for the reason that I did not choose to assume any responsibility of a financial character.

The Accusers give, on page 30, two extracts from my letters, both which are changed from the original. It would seem as though the words

"It is a long cherished hope of mine,"

formed a sentence too simple to permit of any falsification, but the adroit and wily author has contrived to do this, by *repeating* the word "long," thus adding greatly to the intensity of the expression.

They go on to clothe two falsehoods in the garb of truth when they say of the machine:

"It arrived in April, 1857, but was laid aside for more than twelve months, when it brought forth a column of printed figures;"

for, while the words are true, they convey the intimation that the machine might have been *sooner* used, and that it brought forth *only* a column. And yet, in the "Defence," § 30, the Council had stated, six weeks before, that a complete set of tables of the True Anomaly of Mars for every tenth of a day had already been computed, the general formulas fully developed, and a special assistant employed (*not* "at Coast Survey expense") upon the work. To Mr. Olcott and Mr. Rathbone I had carried samples of the work, thinking that it would interest them, and I had urged them to visit the Observatory and see the machine in operation.

The sentence is finished by my Accusers with the words:

"And the Trustees were charged two hundred dollars for bringing it into use."

The audacious falsity of this declaration will be felt by the reader who remembers that the Trustees have never paid one cent for bringing it into use. In my original letter of 1858, Jan. 21, proposing the mode of distribution of the promised balance from the State,—a letter written at the request of Mr. Olcott after the matter had been thoroughly discussed with him, although on page 70 my Accusers have made this, like everything else, a ground of attack—I had named the sum of $200 for bringing this instrument into convenient use by the introduction of certain modifications advised by the makers. This appropriation was made by the Executive Committee, March 5, though no notice of it was given me by the Secretary until extorted by my application to the President, March 10. Upon examination I found that it could be worked with more facility than I had supposed, and owing to the embarrassed state of the finances, decided not to make these changes. The only expenses actually incurred for bringing the machine into use amount to about $15, chiefly for a few implements and tools,—and these were paid by me personally, and not by the Trustees, none of whom were even informed that this slight outlay had been incurred.

So much for these men's accusations relative to the Calculating Engine.

35. *The Transit-Instrument.*

We have here, on page 31, a second attempt to make it appear that the *large* transit-instrument was the instrument which Prof. Bache, in 1855, promised to lend to the Observatory; whereas it is easily demonstrable from his letter that he referred to such an instrument as is now mounted in the longitude station, having been placed at the Observatory in July, 1855. Instead of giving Prof. Bache some credit for desiring to do more than he promised, an attempt is made in this misstatement to show that he did not fulfil the pledge he gave! These are very small points to misrepresent! But it is the aggregation of such small misrepresentations

which has given the "Statement" any force which it may possess, apart from that derived from the garbling, perversion and falsification of pretended quotations.

The large transit-instrument which is "in its boxes," was not mounted because the cost of doing so was three or four times that of mounting an instrument quite as effective for all the present uses of the Observatory. In a spirit of economy, quite opposed to that spirit of extravagance charged by the majority, I did not recommend the mounting of the larger instrument,—since the small one was mounted and adjusted for the longitude-observations in March, was in excellent working order, and entirely adequate for all requisite purposes. The Executive Committee appropriated the means which I had *not* asked, for mounting the larger instrument;—doing this, either in a spirit of waste or to give me annoyance.

To put up so costly an instrument, when from the nature of the case it could only be employed for purposes which the smaller instrument already in use was perfectly adequate to accomplish, would, in my judgement, have been both "injudicious" and "reckless."

36. *Appeal for Endowment.*

On pages 31 and 32 the Accusers speak of the efforts to increase the endowment,—efforts which it is implied were confined to New York city, although large sums were in fact contributed elsewhere,—and of which it is carefully remarked that "Messrs. Olcott and Armsby conceived the purpose." And they farthermore say:

> "Although the funds of the Observatory already exceeded anything that had originally been contemplated, yet these efforts to increase the endowment, were deemed essential, in consequence of the repeated assurances of Dr. Gould, that more funds were required to secure the objects of the Observatory."

The boldness of men who could make the latter assertion, after having published the letters of the Council of Aug. 8 and Aug. 11, 1856, (the one in their Inauguration-pamphlet, and the other in a special pamphlet, printed and disseminated in New York to aid in the appeal,) needs no comment. That no attempt at active operations should be made until an endowment should be secured capable of yielding *at least* $10,000 annually, was the primary condition upon which the Council agreed in August, 1855, to assume any connection with the institution. This understanding had been kept steadily in view since that time. On the 6th of November, 1856, only a week before the time referred to in the passage just cited, Dr. Armsby had written me "We *will* have the $150,000." But, now, in order to afford room for the absurd charge of "delay," this condition is unblushingly ignored and denied, although continually

acknowledged in the letters, and repeatedly in the printed publications, of these very men, Olcott and Armsby, themselves.

On these pages two extracts are given; the one from a letter of Prof. Bache, the other from one of mine. Of the correctness or falsity of the former I know nothing; but my own is garbled. "More anxious" is dexterously altered into "most anxious," thereby changing the meaning;—one sentence is omitted from the middle of the passage,—and in the sentence "the only one I have found," "*I*" is changed into "*we!*"

The quoted extract ends abruptly, thus avoiding anything inconsistent with my Accusers' false charge of "wasteful expenditure." I will continue the paragraph as written by me to Dr. Armsby, 1856, Nov. 14:

"About the improvements on the hill, my feeling has been that, while we were unwilling to run in debt or endanger the *capital* even for a library, we should be economical in minor affairs. My suggestion would be to scrape together everything you can lay hands on, and only use income,—even for permanent work;—restricting or delaying at first to add income to principal, rather than the reverse. Do not forget that the $10,000 estimate pre-supposes an eye to the pence, and that 50 per cent more might be judiciously employed to the great advantage of the Observatory, without any fear of extravagance. And that whatever is laid out now is taken from the capital. The next appeal will have to be for books."

It will be recollected that all these appeals were made, and the funds contributed, for the "*endowment*," though it now appears that the money was expended about as fast as it was paid in. The omission of the paragraph bearing on this point, as well as the other from Mr. Low's letter, ["Statement," pp. 34, 35,] is noticed on page 228.

37. *The New York Times.*

On page 32 an attempt is made to create hostility to Prof. Bache on the part of the Editor of this influential newspaper; an attempt which would seem to have been successful, from the acrimony with which the paper has attacked both him and myself. To produce this result, a passage is extracted from a letter of Prof. Bache relating to another subject (disconnected from Observatory matters), and made to apply to the article of the N. Y. Times advocating the very laudable enterprise of an Observatory in that city also. The small jealousy of other scientific institutions, which has pervaded the acts of Messrs. Olcott and Armsby, and which is manifest in their talk about "rival institutions"—as though other scientific enterprises ought to be checked to render their own more conspicuous,—has been noticeable from the first; and it has frequently been pleasantly chided since our intercourse began. But nothing was more natural than for them to attribute to others the same narrowness of mind. To do this, however, the Accusers have found it necessary to perpetrate another fraud;—by extracting this passage from a private letter of Prof. Bache relative to an article which had appeared, *attacking the U. S. Coast Survey!*

The letter was in no sense official and not even relating to the Observatory; and yet the authors of the "Statement" say that

"They have thought fit to confine themselves to matters relating directly to the Dudley Observatory, and have availed themselves only of such letters as are

strictly of an official character, carefully abstaining from all reference to such as might by any possibility, be regarded as confidential. (pp. 163, 164.)

Could malignity go farther than this in distortion and misrepresentation? Injury to a public work which has done and is doing so much for New York city, the great commercial center of our country, and for the State of which it is the commercial focus, is actually invoked in order to reach an individual member of the Scientific Council,—which had incurred the displeasure of Mr. Olcott by vindicating the good name of the object of his bitter persecution. Two pamphlets of matter addressed to the Editor of the Times, and venomously attacking the Coast Survey, have recently been published, and widely distributed by Mr. Olcott. The second, however, to the credit of the journal be it said, never appeared in its columns.

38. *Mr. Everett's Address.—Quotation on page* 33.

The petty endeavor to create unkind feeling or odium, by the publication of a garbled, distorted and partially fabricated copy of a letter written by me, relative to the correct spelling of certain proper names in Mr. Everett's address, has been already exposed in the First Part of this Reply,—(pages 31-34,) where it was used in illustration of the Perversions by the Accusers. By the use of gross falsehoods in introducing the letter, by garbling, by interpolation of words adapted to convey an offensive impression, and by so adroitly italicising particular words and phrases as to change the whole tone:—the authors of the pamphlet thought that this letter could advantageously be brought into their attack, although entirely foreign to the maintenance of any of their charges.

In concluding their commentary, they say

"The Trustees did not feel authorized to make any changes in Mr. Everett's oration at Dr. Gould's request."

If anything more can be needed from me to characterize this proceeding of the Accusers, it will be afforded when I state that the suggestions to Dr. Armsby, in this letter of Oct. 11, were made at his request.

39. *Telegraph wire to New York.*

The comments upon page 34 of the "Statement" relative to the passage from my letter of 1856, Dec. 31, cited at the bottom of the preceding page, afford one of the most striking illustrations of misrepresentation and unprincipled distortion which are to be found in the whole pamphlet. The extract itself, however, is one of the eight exceptional extracts already mentioned, upon which neither garbling, mutilation nor fabrication have been employed.

This subject of the telegraph wire has been already fully explained, both in Part First [pp. 155, 156] and in § 15. The fact that a new *wire*,—not a new *line*, as the Accusers intimate on page 34,—was considered a pre-requisite when the plan of sending time to New York city was formed, and formed a part of those appliances which that city was to provide previously to putting the plan into operation, cannot be

so successfully denied as my Accusers seem to suppose. For the original paper, on which the estimates were made in the first discussion of the subject between Mr. Olcott and myself, a year previous, still exists. And in the letter to the gentlemen who urged the plan upon the acceptance of the N. Y. City Government,—sent at the same time the original proposition was transmitted to the Mayor by Messrs. Van Rensselaer, Olcott, Bache and myself—the same thing stands in uneffaceable black and white.

And yet these shameless Accusers now have the effrontery to say:

"The necessity for *a new telegraph line*, from Albany to New York, was, to the Trustees, a startling proposition. It created great surprise. Certainly it could not have entered into Dr. Gould's calculation, when he so confidently promised that the time should be transmitted regularly to New York city, and to all the railroads, on and after the 28th day of the preceding August."

They say this although Mr. Olcott had written me, 1857, Jan. 6:

"We must get the corporation of New York to act and lay the wires before we can drop a ball there;"—

and although Dr. Armsby had notified me as follows, 1856, Jan. 9:

"The letters to the Western and Hudson River Railroads will be delayed a short time, until more accurate estimates can be made in regard to the cost of telegraph wires, &c.;"

and had also written, 1857, Jan. 6:

"The work of collecting small subscriptions must be done by an agent. We think of sending Mr. Hague down for the purpose; and to attend also to the adoption of the time-signals by the Common Council. I do not believe anything can be done with the Common Council until considerable lobbying is done. Mr. H. has some friends who will assist him, and he will not be known as *our* agent in that matter. . . . .

All we now desire is to have this thing settled, and then we can take our own time to perfect the arrangements.

You must not allow your kind feelings toward us to influence you in hastening the completion of your own work now on hand, or induce you to overwork yourself as I know you have done heretofore. Take your own time; so far as we are concerned, your continued good health is far more important to us than a few months' time now."

The fraud in the assertion of the Accusers consists not merely in the untruths that the telegraph wire to New York did not enter into the original calculations, that it "was to the Trustees a startling proposition," and that it created great surprise a year afterwards. Nor yet is the sly change of the word "*wire*" into "*line*" the only other fraud; but they convey the idea also in support of their charge of "wasteful expenditures," that the expense was to be borne *by the Dudley Observatory*.

It is shocking to have to deal with such assertions, and with such men. It is the most revolting duty of my whole life, to deal with men possessing the shamelessness, the dishonesty and the low pettifoggers' cunning which could condense all this mass of falsehood, and still another untruth about "confidently promised," into the first seven lines of their thirty-fourth page.

40. *The Credit of obtaining Subscriptions.*

I have already called attention, in § 26, to the falsity of the denial of Mr. Olcott and his coadjutors, that the Scientific Council had been instrumental in procuring donations to the Observatory. Would that the denial were correct, for in that case those pledges would not have existed, for the fulfilment of which the members of the Council have struggled against such obstacles. In that case, too, much of my own suffering might have been spared;—and the easy part chosen of abandoning the institution to its threatened fate in the hands of Messrs. Olcott and Armsby.

The question is not as to the "credit of obtaining these subscriptions,"—Mr. Olcott is welcome to all he desires and can obtain;—although most minds are so constituted that they would award the "credit" to the donors. But it is, and has been, a question of pledges to be maintained; of faith to be preserved inviolate; of a sacred trust to be defended.

The Accusers, on page 126, in a passage filled with sneers and attempts at sarcasm, say, as has already once been quoted, that

> "The Trustees cannot persuade themselves that a single dollar has been obtained for the Observatory, 'by the use of the name' or 'the pledge of the management' of the Scientific Council. Such is not the fact."

And in the part of their "Statement" now under consideration, they say

> "The year 1857 opened with a gratifying increase of subscriptions, secured mainly through the energy of the President and Secretary of the Board of Trustees. As others have claimed the credit of obtaining these subscriptions, it may be as well to give a few of the letters received about this time:"

and then proceed to give alleged letters from five different donors, in proof of the assertion.

Mr. Olcott was at the time, not the President, but the *Vice President* of the Board, although the little piece of conceit by which he speaks of himself throughout the "Statement" as the President, may be overlooked.

I will first give extracts from certain letters of his own; and then speak of those which he quotes from others:

1856, Nov. 24. "Professors Bache and Henry were efficient. They argued for two days before the Board of Underwriters, which secured us their unanimous commendation to the mercantile community. We have arranged to have the action of the Board of Commerce about ten days hence. . . . . We were advised not to make any considerable effort till the action of the Board of Commerce was first had. Since my return home I have read a letter from Mr. A. A. Low, a merchant in New York, stating "the interest with which he had read the documents sent to him, containing the speech of Mr. Everett and the remarks of Prof. Bache and Dr. Gould," and authorising us to draw on him for $1,000. Such a voluntary offer is cheering. We had not called upon him at all."

1856, Dec. 8. "The Board of Underwriters and Chamber of Commerce have done all and even more than you asked. You have, I presume, seen their resolutions."

1856, Dec. 25. "We carried our subscriptions in New York, including those previously made, to a little over $5,000. The New York Committee have

issued a circular, under their own names, appealing strongly in our behalf to their fellow citizens."

The five alleged letters given by Mr. Olcott and his fellow accusers, on pages 34 and 35, are professedly for the purpose of showing that he, and he only, was entitled to what he calls "the credit of obtaining these subscriptions." But these letters show no such thing. And besides, some of them appear to have undergone considerable change in the hands of the Accusers.

It will not be imagined that I have access to the letter books or "press-copies" of these donors, if indeed they preserved any copies; nor yet that I have been favored with the originals. But in the month of June, 1857, Mr. Olcott and seventeen other Albanians, friends of the Observatory, published a little pamphlet, appealing for funds. In the introduction they say

"The enterprise is national in its design, as it will be in its benefits, and it should have the co-operation of every section of the country."

and they then go on in the little 16mo. book of 22 pages, to give sundry letters and remarks of friends and donors to the institution, together with the Council's letter and schedule of August 11, 1856. Three of the letters cited on pages 34 and 35 of the "Statement," or extracts from them, are given in this little pamphlet. The discrepancies discovered on comparison are, in every case, considerable. For example, Mr. Low's letter, as given in the small pamphlet, expressly declares his gift to be a contribution "to the funds from which it [the Observatory] is expected to derive its annual support." This, as well as the allusion to the contents of the document which had interested him, is conveniently omitted in the "Statement."

But the point to which I wish to call attention, mainly, is that in every instance, without exception, these contributors had before them, not merely solicitations from Mr. Olcott,—but documents prepared for the purpose, and which included communications from the Scientific Council, or some of its members. See also the extracts already given on pages 184, 185.

41. *The Normal Clock again.*

Upon page 35 of their "Statement," the Accusers say:

"On the 2d of March, Dr. Gould, as if still anxious to keep up the courage and confidence of the Trustees, although no apparent progress was making, writes from Cambridge: "Everything seems to be going most satisfactorily, and hastening towards completion. I have heard from our clock, which was completed, all but the 'putting together.'"

"Nearly a year and a half has since elapsed, and the clock has not yet been 'put together!'"

The non-arrival of the Normal Clock from Altona is repeatedly brought up by the Accusers, and forms the subject for very many sneers and insinuations against the donor or myself, besides those already answered. The subject has perhaps received all the notice it deserves from me, both in Part First and in §11 and §29 of this, Part Second, and Mr. Corning has spoken for himself, in his letter to Mr. Thacher, given by the latter gentleman in his "Key to the 'Trustees' Statement,'" page 117.

I believe that it is neither violating the sanctity of private correspondence, nor making a use of the letter which its author would disapprove, when I take the liberty of here publishing a couple of paragraphs from a letter written me by Prof. Peters, of Altona, to whom "the Trustees" had sent a copy of their "Statement." It is but a specimen of many letters received from astronomers since the publication of this atrocious attempt to "crush;"—letters which I shall "bequeath as a rich legacy" unto the kindred who may survive me. But I select it, because written by the astronomer who had kindly promised to test the clock when completed,—by the friend to whom I have repeatedly written concerning it since it was first ordered,—from Altona, where the writer had followed the construction through all its stages;—circumstances which form a sufficient commentary upon the contemptible sneer of the Accusers, on their 160th page, viz:

"What more natural, if the clock was ever ordered, than to make some allusion to it, and some enquiries as to its progress, in a letter addressed to the very place where its maker resides?"

From a letter of Prof. Peters, Altona, 1858, Sept. 30.

"I have read with intense indignation the pitiful attack upon you which they have printed. It is an old experience that makers of astronomical instruments and clocks almost never succeed in finishing them at the time previously expected and promised. Krille promised me a galvanic register for Sept. 1 of last year, and did not furnish it until June 1 of this year. But no competent person would conceive the idea of reproaching either him or me; because unforeseen difficulties are always occurring in the construction of new instruments; and it is better to receive good instruments than the bad ones which result from an over-hasty construction. In your case, moreover, I know full well how much you have laid it to heart that the normal clock should be sent you as early as possible.

In this special case of the normal clock, which you ordered of Krille, the separate parts of the clock were long since completed, but for carrying out this entirely new form of putting up in a hermetically sealed case, the needed means are wanting in consequence of the crisis," &c., &c.

I stop in the middle of the letter, because its honored and generous writer goes on to speak regarding a personal subject upon which I have determined to dwell as little as possible.

The sneer with which the Accusers close their paragraph is intended, either to imply censure upon me, for the maker's delay, or more probably, (taken in connection with their clause, page 160, "if the clock was ever ordered,") to intimate that, for some unknown reason connected with the "strange delays," I was pretending that the construction was progressing, although the whole was a fiction. The latter theory, however absurd, is quite of a piece with the other theory that by "humiliating importunities" and "begging the Trustees to give me their votes," I obtained the charge of the Observatory in Jan., 1858, in order to manifest "a discreet unwillingness to test [my] skill as a practical astronomer!"

But to understand the processes to which the evidence has been subjected, let us recur to the paragraph, as given at the beginning of this section, and consider it piece-meal:

1. My letter was not written "on the 2d of March," but in June,—and thus three months are obtained to make out the "nearly a year and a half."

2. Two sentences are selected, the one from the beginning, the other from the end of a letter written upon other subjects,—the two lines about the clock having been added, like a postscript at the end,—and are then presented, as if relating to the same subject.

3. The first of these sentences relates, not to the European instruments, but to the work in Albany, the city to which I was writing. I had, not long before, expressed annoyance at the "continual delays,"—but as the prospects seemed to improve, thus expressed my satisfaction in the strictly private letter to Dr. Armsby, from which the extract is taken.

4. The first sentence is mutilated by the omission of a clause which would conflict with the new meaning to be given by the Accusers. As written, it stood, (the omitted words being italicised:)

"Everything seems, *from the accounts of Dr. Peters and Mr. Smith*, to be going *on* most satisfactorily, and hastening toward completion."

42. *Quotations on page* 36.

Though at some cost of space, I will reprint this page, excepting the last two lines, and place the true extracts from my letters in juxtaposition with the falsified ones:

"*Statement of the Trustees*," p. 36.

About the same date, Dr. Gould writes:

"I have been over-running my authority, by purchasing the Philosophical Transactions of the Royal Society of London, from the Astor Library. I send by this mail a draft on you for $343.75, which includes the expenses of boxing."

The draft, as usual, was immediately paid; but the Observatory building was not then in order.

A few days later, Dr. Gould writes:

"I have drawn on you, in favor of Mr. Farmer, for $250. He came out, saying he was in need of money, suddenly, to meet a note."

The draft was immediately paid; but the money was not due, nor were the Chronographs or clocks finishd until May, 1858.

What I wrote to Mr. Olcott, 1857, *March* 28.

I have been overrunning my authority, and availing myself of an additional chance, too good to be lost, of purchasing the series of the Philosophical Transactions of the Royal Soc. of London, from the Astor Library, at a price scarcely more than nominal. And by this mail I send him a draft on you for $343.75, which includes the expenses of boxing these books for transportation. They need be the source of no uneasiness as to storage, as Dr. Cogswell will let them lie subject to our order until we want them.

I think they would bring $600 at auction without difficulty next week, and probably much more.

1857, *April* 9.

I write to say in haste that I have drawn on you in favor of Mr. Farmer for $250. He came out saying that he was in need of money suddenly to meet a note, and wanted us to stand in stead of some source which had suddenly failed him. Very little now remains to complete the apparatus, and although I have held back till now, in order to spur him on,—the whole is so nearly completed that I felt no hesitation in giving him the draft. I suppose that the whole bill, when closed, may amount to 150 or 200 more, but cannot exceed this."

A few days later, he writes:

"We shall have to be making comparatively heavy demands upon you soon for the dome work, observing chairs, &c., &c., which are essentials."

1857, *April* 14.

I hope that it will not prove necessary to spend much upon grading or dressing the ground, until the tide begins to rise again. We shall be wanting to make comparatively heavy demands for the dome-work; and then the observing chairs, &c., &c.,—which are essentials.

At the same time it is proper to state that Dr. Gould evinced commendable interest in the pecuniary affairs of the Institution; for, in one letter, he asks:

"How have your donations run up, since February 23d?"

What I wrote to Dr. Armsby,
1857, *April* 13.

How have your donations run up since February 23d? And have any steps been taken about the Hamilton College Instrument?

And in another, he anxiously inquires:

"How come on the legislative appropriation and the donations? Has there been anything more from New York, in the pecuniary line?"

1857, *March* 24.

"How come on the legislation, and the donations? Has there been, &c.

43. *The Continual Delay.*

This, one of the gravest charges,—and probably the only really grave one, except perhaps "Wasteful Expenditures," which will have found any credence among sensible men,—has been disposed of in Part First,—and requires, therefore, only an incidental allusion here.

It has been shown

That the delays in the construction were due to no fault of mine, and were the subject of my constant appeals. Abundant additional evidence from Dr. Armsby's and Mr. Olcott's own letters, can at any time be adduced, if needed, in corroboration of this point,—as well as from letters of Messrs. Hodgins, Smith, Hague and Peters.

That the delays in the construction of the instruments were due to no fault of mine, and were the subject of constant appeals. Abundant additional evidence from letters of the makers, Messrs. Pistor and Martins, Krille, Spencer, and Farmer, can at any time be adduced, if needed, in corroboration of this point.

That these delays were after all comparatively unimportant, since it was understood that the institution was not to commence its activity until the full endowment fund had been provided.

That no blame on the subject was ever imputed to *me*, prior to the difficulties of December and January last, when pretexts were needed.

That the assertions "not a single contract had been fulfilled," "not a solitary promise had been redeemed," "no practical results" "realized," are severally gratuitous and false.

Nothing more, therefore, is needed here;—still I cannot refrain from adding the following short extracts from the overwhelming mass of evidence in my possession:

From Dr. Armsby, 1856, May 9:—"I perceive, from your previous letters, there is doubt as to the completion of the instruments by the time proposed. I would give myself no trouble on this point, but let everything be done *well*, even if more time is necessary."

1856, July 20. "I did not think of the preparatory work to be done before the stones arrive, until I received your letter of yesterday. I have been disap-

pointed at the delay of our architect, builder, and stone-cutter. Everything has been delayed, though I have been constantly hurrying them all. A new road had to be built, and new materials drawn, and new plans prepared. But this week we shall begin to show progress. The instruments, as you will learn by Spencer's letter, will not be here."

1857, April 19. "You have overworked yourself for a long time past, and should take time to rest and recruit."

1857, June 12. "The gas works will help to fill Hague's Hole. All, all, seems to be progressing steadily."

From Mr. Olcott, 1857, March 25. "I believe there has been no delay which could have been avoided."

1857, May 14. "All things I believe are progressing finely."

See also Dr. Armsby's letter of 1857, Jan. 6, on page 226.

44. *Quotations on page* 37.

I will go on and copy still another page from the "Statement:"

"Statement of the Trustees," pp. 36 *and* 37.

These enquiries were, doubtless, promptly responded to; but, at the same time, the Trustees could not but feel, that it was time that some practical results should be realized. Not a single contract had been fulfilled. Not a solitary promise had been redeemed. It will not be thought surprising, therefore, that at this period, one of the Trustees should have ventured to write a letter to Dr. Gould, which drew forth the following reply:

From Dr. Armsby's letter, 1857, *April* 20.

If we had reason for congratulation, little more than a year ago, with only the Old building and the $6,000 for the Heliometer, we certainly ought, now, to feel some degree of satisfaction with the progress that has been made, and to look forward with some degree of hopefulness to the future. But pardon me if I say, what I have sometimes thought: that your hopefulness has seemed to diminish, just in proportion as our hopes and wishes have been realized. Perhaps I am too severe; if so, I beg you will forgive me.

Frequent inquiries are made after the M. Circle and C. Clock, but I have only to say, I have heard nothing for months of either.

I know nothing of Mr. Smith's contract for the E. or W. room, or of his promises. . . . One thing is evident to every one, that very little progress is being made.

"Shall I tell you, my dear sir, how much your letter has grieved me? At first I thought I would not, for I am sure you would not willingly give me pain. But the implied reproach was not deserved. Hopefulness is a compound of enthusiasm and experience, and for the most part not within our own control. If so little progress is making, as you think, I am sorry it should be needful to assure you that it is no fault of mine. Remembering these things, and, also, that it is but a small part of all the labor that makes itself

What I wrote to Dr, Armsby, 1857, *April* 21.

Shall I tell you, my dear Doctor, how much your letter has grieved me? At first I thought I would not, for I am sure you would not willingly give me pain. But the implied reproach was not deserved. Hopefulness is a compound of enthusiasm and experience; and for the most part not within our control,—so that its absence would be a subject for regret, rather than censure. Yet, were it subject to the will, my own could not, I think, have been more thoroughly enlisted. When

manifest in the form of results, you should not, I think, be disposed to censure me for lukewarmness; and if I could not claim that your censure is ill deserved, I might plead nervous exhaustion, in extenuation of a great deal of remissness; and if you palliate those who have behaved so badly, by assuming that they have done the best they could, surely you will not deny as much to me."

Complaints had only been drawn forth from the Trustees, by a painful sense of duty. Large sums of money had been invested in the Observatory; more was daily asked, by the Trustees, from a liberal public. But they felt the embarrassment of soliciting donations for an institution, on behalf of which such flattering promises had been *publicly* made, and which had, as yet, accomplished no results, that could be urged as a claim on popular favor and support.

one is vexed at the slowness of people who have pledged their honor for promptitude,—has left no stone unturned to bring the most diverse influences direct and indirect to bear upon them,—the implication that he is delaying would have a jocose side, were one in that vein. With your letter this morning came two others from valued friends, censuring me for giving a disproportionate share of time and attention to driving the Observatory matters, and being needlessly troubled at their slowness. I try to draw the inference that I am not erring too much on either side.

If so little progress is making as you think, I am sorry it should be needful to assure you that it is no fault of mine. Never has a plan or sketch remained longer in my hands than was necessary for a proper study and criticism, and never has this time exceeded forty-eight hours. Never has the architect been without material for many weeks in advance; never the overseer without instructions enough to keep him busy. On the other hand, when trusts are committed to me with such large discretion and full confidence as you have honored me with, I cannot slight the responsibility entailed; but must act in my own field according to my best light,—disregarding the criticisms of those who have not better means of judgement. And I think it will be easy for me at any time to convince you on any desired point, that the deciding reasons were, if not the best, at least apparently so.

It is now a fortnight that I have been daily expecting the completed plans for the dome,—which have been elaborated by the study and contrivance of months, and continually discussed, both orally and by writing, with Mr Hodgins. These once received and found satisfactory, I know of nothing to interfere with their immediate execution. As to the past delays consequent on the *changes of the transit-room*,—you will surely hold me guiltless there.

From Mr. Smith I have heard but twice since I was in Albany, although repeated requests have been made for information on certain points. Also he wished to modify the plans for the observers' house—and I asked him to do so and send them on,—but they have not come. Still Dr. Peters keeps me posted for the most part as to what is doing. Were the plans once settled,—the bad weather would not interfere with the contracts. The plans for roof and shutters have been in his possession since the end of February,—those for the floor since the 8th of April. One-third part of all my energies has been given to the Observatory, since the end of November. About the clock I have written *six times* since January, and when I can once deliver to the Trustees their finished building, and tell them that it is the best in existence, as far as it professes to be anything, it will be a relief and joy, such as I have seldom known.

Remembering these things, and also that it is but a small part of all the labor which makes itself manifest in the form of results, you will not, I think, be disposed to censure me for *lukewarmness*. But if so, let me add that neither you nor any other person know the troubles against which I have had to struggle, the toils to encounter, or the weariness of spirit which has almost broken me down. And if I could not claim that your censure is ill deserved, I might plead nervous exhaustion in extenuation of a great deal of remissness. And if you palliate those who have behaved so badly, by assuming that they have done the best they could, surely you will not deny as much to me.

So much, my friend, I may say. But probably your words convey more than you intended, and you too were weary and worn when you wrote.

From a letter of Dr. Armsby to me, 1857, April 23.

I have just received your kind letter of the 21st, and hasten to assure you that I regret most sincerely having said anything that might seem censorious. I deeply regretted having written as I did; and in my haste I had no time to reperuse or reflect. . . . . .

Again I must beg you to pardon me for whatever may seem unkind or censorious, and believe me ever and most truly your friend,

J. H. ARMSBY.

Do the Accusers really mean to assert that this correspondence with Dr. Armsby was official? They publish, it will be observed, an extract from my letter made up of detached sentences taken from different parts of the original and put together as if they were written continuously. They carefully omit every sentence in which the blame of the delay is attributed to the parties really in fault; all my complaints of the slowness of others upon whom the work depended: my statement that I had written about the clock six times since January; my earnest expression of my own sense of responsibility. It was necessary to make the public believe that the fault was mine alone, and so my letter is garbled to suit the purpose. I publish my answer to Dr. Armsby in full. I ask that it may be read and judged as a whole. From Dr. Armsby's first letter it will be seen that he uses such language as, "our hopes and wishes have been realized;"—and from his reply to me it will be remarked that on receiving my answer he humbly apologized for having written the letter which called it forth. Eighteen months have since elapsed. The false friend has become an open enemy. My answer to the implied censure for "want of hopefulness" is mutilated, garbled and trumpeted forth to the world, to sustain the false and baseless charge that open and direct dissatisfaction had been expressed at my "delay." I solemnly declare that none was ever expressed, or to my knowledge implied (unless it can be found in this letter from Dr. Armsby, so promptly apologized for),—until the period when the intrigues of Mr. Olcott and Dr. Armsby, against me, were ripening for execution.

45. *Acceptance of Excuses.*

The Accusers now say, that in April, 1857,

"What they *did* do, was to accept Dr. Gould's excuses, and, hoping for the best, continue on as before." (p. 38.)

That they did not accept excuses which were never made, needs no declaration. I will therefore dismiss this point with a quotation from a letter of Mr. Olcott, written within a few weeks of this "same time":

1857, *March* 5. "The late severe storm has arrested work at the Observatory, and we embrace the occasion to call in and settle up all old bills. The carpenter, Boardman, sends in a bill longer than the moral law and not half as good, for about $2,400, on which he has been paid all but $561. Pruyn and Lansing's bill is $752. Smith has just left me and is surprised that so much money has made so little show on the hill. He wants to start fair and secure, so that he may contract for the future. I think he will carry out your instructions to the letter, and give us entire satisfaction. I dare not speak what I feel in regard to the past."

46. *Practical Results.*

The Accusers intimate (page 38), that they began to tire of "extravagant promises" and to desire "practical results;" they talk of "paper bulletins," and "a volunteer adviser;"—they say, too, that

"They had waited nearly twelve months, and were then apparently more distant than ever, from the fulfilment of their expectations."

Of the ingratitude and perfidy of Mr. Olcott and his coadjutors, I will say nothing in this connection, but will merely recall the two public letters of the Council which "the Trustees" had used for obtaining subscriptions,—the original understanding in 1855,—the repeated and publicly avowed understanding in 1856,—and the full understanding in 1857; that no active astronomical operations should be *commenced* until a proper endowment should be *completed*. The Council hoped for no more specimens in the United States, of splendid and pompous promises for budding institutions, followed by disastrous and mortifying failures; and they meant that the Dudley Observatory, the scientific control of which had been intrusted to them, should afford no new illustration of this.

If turning a house into an observatory, obtaining a choice library, and giving full and laboriously studied instructions for instruments of a high order, may not be considered as entitled to rank among "practical results," I fear that the Accusers would be difficult to satisfy under any circumstances. It is now evident that what they wanted was show and "revenue." I had supposed their real aim to be the professed one, the "advancement of astronomy." Meantime the observations for latitude and for longitude by occultations had been going on.

The Accusers illustrate their theory of "practical results" by a quotation on page 39, from a letter of mine to Mr. Olcott. This, like other quotations, is mutilated and garbled,—but I forbear dwelling upon it, since only ten words are omitted, and other specimens of the process are abundant.

47. *Patronage.*

From the "Statement of the Trustees," pp. 38 and 39.

On the 22d of April, Dr. Gould writes to Mr. Olcott, expressing his conviction that the Observatory must be conducted, not only with a view to its "results for astronomy, and the laws which govern the celestial hosts," but, also, as a means of "attracting, enlisting, and concentrating, lovers and patrons of science." The Trustees, it is perhaps needless to say, were then, and remain now, of the same opinion.

What I wrote to Mr. Olcott, 1857, April 22.

All seems to promise a great central accumulation of intellect and study in your good old city; and may God bless the efforts you are devoting to this end. That the Dudley Observatory may contribute largely to the fulfilment of our hopes is very certain; and I think I have mentioned to you, as I know to Dr. Armsby and Mr. Hawley, my full belief that, great as may be its results for astronomy and the laws which govern the celestial hosts, its influence of the reflected, indirect, kind will be much greater still; and that it will exercise an immense power in attracting and concentrating lovers of science from all the regions around.

The extract from the press-copy of my letter which I here give, conclusively manifests the wilful falsification of the authors of the pamphlet, in asserting that under date of April 22d, I expressed my conviction "that the Observatory *must be conducted*, not only with a view to its results for astronomy, &c., &c., but also *as a means* of attracting, *enlisting* and concentrating lovers and *patrons* of science." I said nothing of the kind, but simply expressed my belief that *it would* exercise an immense power in attracting and concentrating *lovers* of science. I figured Albany to myself as the seat of a future University,—as an intellectual center,—and the Dudley Observatory as a means to such an end. The Trustees insert the words "*enlisting*" and "*and patrons*,"—not so small a matter as it seems, but a forgery, intended to imply that I had encouraged their scheme of making an astronomical observatory a mere show box to attract and amuse their business customers, and secure the "revenue."

48. *Course of Dr. Peters.*

The Accusers go on (page 39) to compliment Mr. Olcott's favorite. They say that, "by his evident anxiety to bring the Observatory instruments into practical use," by his zeal and his manners, he "had gained their esteem and confidence; and they observed, with deep regret, a disposition to interpose unnecessary obstacles, in the way of his success."

Dr. Peters's province at the Observatory was distinctly defined. He had no official relations with the Trustees; but was solely and exclusively my representative, so far as Observatory work was concerned; and his duties were clearly prescribed. The amount of his alleged "evident anxiety to bring the Observatory instruments into practical use," is well illustrated by stating two facts.

First, he had nothing whatever to do with instruments, except the Coast Survey transit and zenith telescope, which I had procured for him to use in the latitude and longitude observations for the Coast Survey, (which he never reported,) and the small portable telescope or "comet-seeker," with which he had been requested to prosecute a search for comets.

Secondly, none of the Observatory instruments had then been received, excepting this small telescope, and the calculating engine, which he could not use, of course.

Near the close of 1856, Dr. Armsby applied to me to recall Dr. Peters, who, he said, was impracticable and highly offensive to the workmen and to Mr. Hague,—the overseer just appointed. In reply I offered to recall Peters if he should desire it,—but defended him as strenuously as I could. I give extracts from a few of Dr. Armsby's letters about this time:

1856, Oct. 30. "If you will advise Dr. Peters to give your instructions to Mr. Hague, *and to keep quiet himself*, (he is very indignant at our course) all will go on well and as rapidly as possible."

Nov. 4. "I am sorry you have been troubled so much with our difficulties. Your letter had a good influence on Peters, and reconciled him to the continuance of Hague. At first he would not give any information to Hague, and said he would have nothing more to do with it. . . . Hodgins will go on devising, Hague executing, and Peters approving, or, as is most common, disapproving,

as long as necessary. Peters is a good man, but peculiar, and somewhat liable to misunderstand."

Nov. 5, "I would not recall Peters unless you think it best, or unless you can supply his place by a good man and *an American*."

Nov. 11. "I know nothing of cutting down the tower except that Peters has been talking of it for a month, and I supposed of course that you were advised of it."

The assertion that "they observed, with deep regret, a disposition to interpose unnecessary obstacles in the way of his success," is a wicked slander, a gross falsehood, without the form, color or shadow of a basis. As for Peters, from the first day I bade him welcome to American soil, up to the day of his declaration of hostility in January last, I never treated him otherwise than with kindness and consideration. Since that time I have taken no notice of him whatever, until, in this Reply some account of him has become unavoidable. I hope to escape the necessity of ever noticing him hereafter.

49. *Bill at the Delavan House.*

An extract from a letter of mine to Dr. Armsby, 1857, May 17, is given by the Accusers on page 39 of their "Statement." In this extract I make acknowledgement of having found my bill for two days' board at the hotel, already receipted, when I asked for it. They add, apologetically, that "the good taste of introducing this extract may be questioned." Still, their views of taste, and their ideas of what belongs to the self-respect of gentlemen, are such that they consider that "the reason and propriety of this quotation will at once be conceded."

On p. 94, speaking of the Scientific Council, they also remark:

"They did not, as on former occasions, apprise their friends in the Board of their arrival; nor did they, as they had been accustomed to do, avail themselves of their hospitalities."

These two passages may be disposed of together. While there is no doubt that "the good taste" of such taunts to a former guest, who never abused the hospitality shown, may very well "be questioned," the fact of their introduction entails the necessity for a brief reply. The "friends in the Board," here spoken of, may be taken to mean Dr. Armsby and Mr. Olcott; and the contemptible spirit of the whole passage may be estimated from the fact that the occasion, which called the Council to Albany at this time, was one of unmistakable hostility, bad faith and breach of a solemn compact, on the part of these two men. It was at such time that they now pretend to have expected us to claim their hospitality!—although they well knew, that neither in January, when the Council assembled in Albany, nor for a long time previous, had any hospitality been offered or accepted. The remembrance of a former act of hospitality has done much to seal my lips and to strengthen my forbearance. What my present debt of gratitude, on this account, may be, others can judge as well as I. It is not increased by the consciousness that I was the guest of men capable of turning such a circumstance into a subject for public proclamation. Indeed, I think it might be claimed

that the very acceptance of hospitality should have created an inviolable barrier to shield the guest from subsequent taunts on that account.

During the years 1856 and 1857, I visited Albany about twenty times, to inspect the progress and give counsel. Whenever it was convenient I came without a summons; and, whenever summoned, I came,—whether convenient or not. Not a dollar of the attendant expense was ever charged by me to the Observatory,—and though my sojourn in the city was usually in the household of an intimate and cherished friend, not connected with the institution, except as a donor,—a hotel was sometimes more convenient. At first Dr. Armsby, very properly and considerately, requested me to leave my hotel-account for the Treasurer of the Observatory; but, as the invitation was uniformly declined, its repetition was seen to be unnecessary. On two occasions, I think,—possibly three,—when I had come to Albany by request of the Managers, I was informed on leaving, that my bill was already defrayed by the Observatory. The extract given on page 39 was written 1857, May 17, to Dr. Armsby, and referred to the first of these occasions.

Although the passage is cut short in the middle, although the omitted part would have given quite a different tone to it,—and the word "*it*," in the last line, is changed into "*you*," to give the impression that I allowed *Dr. Armsby* personally to liquidate my hotel bills,—I will dismiss the uncomfortable subject with this brief narrative. It is sufficiently humiliating that there is no means of canceling all semblance of such indebtedness.

The gratuitous assertion—

"That the Trustees, and especially the one to whom the letter was written, have been charged with offering every possible annoyance and obstruction to Dr. Gould, at this very time,"

is evidently introduced by the authors of the pamphlet to create a prejudice against a man who could avail himself of such "generosity," and subsequently make any complaint. There is, I think, a distinction to be drawn between "continual interference" and "every possible annoyance and obstruction." That I did complain of interference, is true; but not until goaded to it by necessity. It is now manifest that my error was in not complaining earlier.

50. *The Astronomical Journal.*

Upon page 40, the Accusers say:

"On the 19th of May, 1857, Dr. Gould writes to one of the Trustees:

'Your kind inclosure of $300 has come to hand, and I have to thank you very much for your thoughtfulness. It will more than cover the present proportion of deficit. Your letter was sweet, but very short.'

"This remittance, sent to him by Dr. Armsby, was to relieve Dr. Gould from what was represented as his *personal loss* in the publication of the Astronomical Journal."

Upon page 145, the Accusers say:

"In another [letter] he is found acknowledging personal courtesies, and in another, the receipt of a *gratuity* of $300, as a contribution towards his pretended loss in the publication of the Astronomical Journal."

When the reader shall have perused the narrative of the facts concerning the Astronomical Journal, I beg him to turn back to these phrases, "remittance sent to him by Dr. Armsby," "represented as his *personal loss*," "*gratuity* of $300," "pretended loss," &c.

The facts which may explain these present flings, and the contemptible insinuations of what the authors did not choose to utter, may perhaps be clearly given, by extracts from a letter on this subject, received from a friend in July last, and from my reply. They speak for themselves:

ALBANY, July 7, 1858.

My Dear Sir—It is charged that you have obtained, *through friends* in Albany, a subscription of $1500 a year (commencing in 1856) towards defraying the expense of publishing the *Astronomical Journal;* that you desired recently the name of Dr Armsby to be erased from the list of those to whom the Journal is sent; that thereupon an investigation was made into the cost of publishing the Journal, and this was found, from the report of Mr. ——, to be less than $300 for the past six months; thus showing that you had, by misstatements, obtained a large sum purely for your own profit. May I ask you to explain briefly anything that may tend to give information with respect to this extraordinary charge? Yours truly,

Dr. B. A. GOULD, Jr. ——.

Reply.

ALBANY, 1858, July 8.

Dear Sir—It had been my hope that the entirely abstruse and unpretending character of my pet Journal would have proved its protection amid the vortex of misrepresentation and traduction, in which everything else relating to my moral, intellectual and physical being and history seems to be at present involved; and that the silence which I have preserved would, by this time, have permitted the calumnies of men, whom I have never injured, to exhaust themselves.

But I cheerfully reply to your inquiries concerning the Astronomical Journal, by giving a concise statement of the history of this matter, relative to which I have, however, uttered no complaint.

This Journal is one designed exclusively for astronomers, and of no popular interest whatever, its province being confined to technical investigations in such portions of the higher mathematics as have an astronomical bearing, and to the successive additions to human knowledge in the several departments of Astronomy. Not only is its circulation confined almost exclusively to professional astronomers, but more than half of this circulation is gratuitous.

It was established by me in the year 1849, and carried on through many obstacles and at large pecuniary outlay, until in the summer of 1856, I determined to bring the publication to a close, as it was costing me about $600 a year more than the subscriptions, and all my superfluous means were required for other purposes, concerning which explanation is unnecessary.

During the ceremonies of Inauguration of the Dudley Observatory, in August, 1856, the public announcement was made by Professor Bache in his published remarks, to my entire surprise and astonishment,—that twelve gentlemen of Albany had contributed the sum necessary to support the Astronomical Journal for six years.

I had often mentioned, in reply to questions, that the excess of outlay over receipts on account of the Journal had averaged $600 a year. And when after the ceremonies, Prof. Bache named Dr. Armsby as the originator and prompter of this kind deed, I expressed my deep feeling and cordial thanks, and was told by Dr. Armsby it was arranged by him as an agreeable surprise for me; as a small expression of the indebtedness of the friends of the Observatory, and that the twelve gentlemen had guaranteed an annual contribution of $50 each. Of course I commenced the new volume; and the publication of the Journal was continued as before, with the exception that the word "Albany" was substituted for "Cambridge," in the title.

Some time later I received notice from Dr. Armsby, that it had been a condition of the subscription, that the Journal should actually be printed in Albany. Had I been aware of this condition I should certainly not have accepted the offer; but without any remonstrance I made arrangements for having the printing done in this city, at the cost of considerable embarrassment,—not, however, arising from any want of effort upon the part of Mr. Van Benthuysen, who has taken great pains. This change took place in June, 1857, prior to which I received through Dr. Armsby $300 as the first semi-annual contribution. This is the only sum that I have ever received from these contributors.

The consequences have been that, owing to the other severe drafts upon my pecuniary resources, I have been obliged to publish with less than half the previous rapidity; that it has, to my deep regret, become impossible for me longer to pursue the system of announcing every new planetary and cometary discovery by a special circular; that it has been necessary for the Journal to dispense with diagrams, engravings, and illustrations of every kind, and that I have been compelled to decline the publication of numerous articles to which I should otherwise most gladly have given a place.

That I took any measures to obtain the subscription; that I had any previous suspicion of the guaranty until announced from the platform at the inauguration; that I made any representations whatever relative to the expense entailed upon me by the Journal, other than conversational answers to apparently casual inquiries; that since the promise of $600 a year in August, 1856, any of the promised support has been received, excepting the above mentioned $300; or that I have in any year since its publication failed to incur heavy pecuniary loss through its means, are statements which are severally untrue.

Some time during the year 1857 I asked Dr. Armsby for these twelve donors' names, and he replied that, for the sake of giving eclat to the inauguration ceremonies, he had taken the responsibility of saying that this pledge had been given by twelve gentlemen, having then entertained no doubt that the list would immediately be filled up; that he felt mortified at the failure, and was not yet without hopes of completing the work. I made no reply, and do not remember alluding to the subject since that time. Believing his impulses to have been good, I felt that delicacy should preclude any criticism of his course.

During the present spring I found that each successive number of the Journal was made the basis for some anonymous and generally calumnious attack through the city press, usually traceable to Dr. Armsby; I was informed, too, by friends that a large list of regular subscribers had been obtained, but subsequently taken possession of by Dr. Armsby and suppressed by him. And being unwilling to pursue the seemingly hypocritical course of continuing to present it to him as a friend, I did order his name to be erased from the distribution list. Had I supposed him able to understand it, or to find any topics of interest in it, he should have continued to receive it, as Dr. Peters has, and does; had he been one of the promised supporters, he should have continued to receive it, as Mr. Olcott has, and does. Perhaps the erasure of his name was an error,—but, at any rate, it was one of self-respect, and not of temper or resentment.

As to the alleged "investigation," I have never heard of it before; and from my slight acquaintance with Mr. ——, and my confidence in his truthfulness, I will not hesitate to say that I disbelieve it. He has no means of knowing any of the expenses of the Journal, excepting the printing, folding and mailing.

You will bear me witness, my dear Sir, that this statement is not of my seeking. Let me add that I have made no complaints, but have allowed the scientific world to believe that the pecuniary burden had been taken from my shoulders.

Very sincerely yours,

B. A. GOULD, Jr.

Such is the history of this "*gratuity*" of $300 *from Dr. Armsby* "to relieve Dr. Gould from what was represented as his *personal loss* in the publication of the Astronomical Journal." I am convinced that not a dollar of the amount came from Dr. Armsby's pocket!

The person chiefly active in circulating these calumnies and defamations in July,—was Mr. Robert H. Pruyn, one of the present Accusers.

The Accusers enforce their theory of the "gratuity" by an alleged extract from a letter of mine, dated 1857, May 19, which is grossly garbled and mutilated.

The last sentence of the alleged passage is taken from the third page and last paragraph of my letter, and incorporated by the garblers with the first paragraph of the first page, with which it had no connection.

The professed extract and the corresponding portion of the real letter were as follows:

From the "Statement of the Trustees."	*What I wrote to Dr. Armsby.*
On the 19th of May, 1857, Dr. Gould writes to one of the Trustees: "Your kind inclosure of $300 has come to hand, and I have to thank you very much for your thoughtfulness. It will more than cover the present proportion of deficit. Your letter was sweet, but very short."	Your kind inclosure has just come to hand, and I thank you very much for your thoughtfulness. The Journals have, amid the disturbances and delays and illness of the past season, come out so very slowly that it will more than cover the proportion of deficit. But in squaring up accounts with the old printer, before commencing with the new, it will be most acceptable.

I forbear from comment, relative to this matter of the Astronomical Journal. Deceived, deluded and betrayed as I have been,—great as have been my struggles to sustain it in a manner worthy of my native land,—I have hitherto refrained from all complaint and do not intend to begin it now.

51. *Quotations on pages* 40 *and* 41.

There are, on those pages, three alleged quotations,—beside the one of which the falsification has just been exposed.

The first is on page 40. I will not consume time and space by reprinting it at length, since the mutilations belong to the less atrocious class. Suffice it to say that in nine lines forming an alleged extract from a letter of mine to Mr. Olcott, 1857, May 26, relative to the proposed dwelling house, ten words are inserted, one is omitted, three are changed, and the arrangement of the sentences is altered for a manifest purpose.

The next specimen of deliberate misrepresentation is the following,—the garbled extract being twice employed in the "Statement" (pp. 41, 145):

From the "Statement of the Trustees," page 41.	*What I wrote to Mr. Olcott (Vice President)* 1857, *June* 20.
On the 20th of June, Dr. Gould writes to the President: "The work upon the hill is apparently going on well. I trust that your arrangements will be as fruitful and successful *as they are wisely and judiciously devised.* Inclosed is a draft for $1,30.50, the purchase money of a set of books for the Observatory, which are daily due in New York."	Your kind letter of the 10th was duly received, and I trust that your arrangements will be as fruitful and successful as they are wisely and judiciously devised. The work upon the hill is apparently going on well, and a very few weeks ought to see everything at last completed. Nothing excepting a few matters of merest detail remains to be done, so far as giving the final

The money for the draft was remitted on the day after the receipt of the letter.

directions goes, and if Mr. —— would only send on the plans which he had promised for the 10th of May, all these could be very speedily disposed of.

Inclosed is a draft (already paid) upon me for $129.50, the purchase money of a set of books for the Observatory, which are daily due in New York, and for entering and forwarding which I will endeavor to provide on their arrival.

The "arrangements" mentioned had no reference "to the work upon the hill," but the expression referred to the following sentence in the letter from Mr. Olcott, to which I was replying:

"Dr. Armsby has probably advised you of arrangements for making pretty extensive appeals for aid throughout the State; and before long in many of the States."

Nothing can be more characteristic. First, the relative position of two sentences is changed so as to make it appear that the "arrangements" mentioned referred to the work upon the hill. Let it be remembered that the Trustees try to make it appear throughout, that all was done in accordance with my wishes, and that I approved of everything they did. Then, as all delays are to be attributed to me, the statement in my letter as to Mr.——is omitted. Finally the fact that I paid myself the draft for $129.50, and that Mr. Olcott was only repaying money which I had advanced, was passed over,—accidentally of course.

The third of these quotations can also speak for itself. The insertion of Mr. Olcott's name is as characteristic as the omission of both the sentences which contain qualifications of the first. The extract is also significant as showing, that not only the letters, whether from Professor Bache, the prominent donors, or myself, which were addressed to Mr. Olcott and Dr. Armsby, but those moreover which were addressed to Dr. Peters, and written in a foreign language, have been subjected to the same process of mutilation, falsification, or perversion.

From the "Statement of the Trustees," p. 41.

On the 25th of July, 1857, the Olcott comet was discovered by Dr. Peters. The importance of this discovery was, at the time, appreciated and acknowledged by the late Director and Scientific Council. Dr. Gould, in a letter dated Cambridge, August 4th, 1857, says:

"It is a very pretty idea to give the comet the esteemed name of the excellent Mr. Olcott."

This was before the late remarkable discovery by the Scientific Council, that the "ridiculous procedure" of thus naming the comet, was "entirely

What I wrote to Dr. Peters, 1857. August 4.

Es ist eine hübsche Idee dem Cometen den geehrten Namen des Trefflichen zu geben. Allein da es gegen alle meine theoretischen Principien ist, den Cometen anders als durch Jahr und Numero zu beschreiben,—so richten Sie es so ein, dass ich nicht dafür verantwörtlich erscheine. Ich will ein wenig Heuchler dabei spielen.

Translation.

It is a pretty idea to give to the comet the honored name of the excellent man. But since it is contrary to all my theoretical principles to designate the comet otherwise than by its year

unwarranted by astronomical usage." The latter fact, although unknown to Dr. Gould, had not, it seems, escaped the research of his greater astronomical associates.

and number, you must so arrange that I do not appear responsible for it. I am willing to play dissembler a little in the matter.

52. *Olcott Comet.*

As the Accusers have thought proper to bring the subject of the "Olcott comet" again before the public, I ask particular attention to the extract which they give from my letter, and request that it may be carefully compared with what I actually wrote.

As to the name which Dr. Peters thought fit to give the comet, for reasons best known to himself, am I responsible for that? I expressly objected to it, as contrary to all my theoretical principles. I expressly threw the responsibility of so unusual and unwarranted a proceeding upon Dr. Peters himself, offering to let it pass in his name, to show the respect which I then cherished for Mr. Olcott's name and character. Is there, in the whole history of controversy, a perversion more deliberately infamous than that of which the Accusers are guilty when they purposely omit my words:

"But since it is contrary to all my theoretical principles to designate the comet otherwise than by its year and number, you must so arrange it that I do not appear responsible for it. I am willing to play dissembler a little in the matter,"—

when they make it appear that I said only,

"*It is a very pretty idea to give the comet the esteemed name of the excellent Mr. Olcott;*"—

and when they actually go on to say,

This was before the late remarkable discovery by the Scientific Council, that the "ridiculous procedure" of thus naming the comet, was "entirely unwarranted by astronomical usage." The latter fact, although unknown to Dr. Gould, had not, it seems, escaped the research of his greater astronomical associates. (p. 41.)

Have the Accusers the effrontery to assert that this omission of my words was accidental? Can any man who has kept up with this controversy believe that it was so?

Yet all this unprincipled misrepresentation, and more like it, as well as this garbled quotation, are repeated on pages 148 and 149. As the Accusers deliberately ignore the history of this affair given by Professors Henry, Bache and Peirce, in their "Defence of Dr. Gould," §7, I shall here reprint a portion of that document and then leave the subject to the judgement of the public.

"The first instrument completed for the Observatory was a small telescope of the kind known as 'comet-seekers,' and Dr. Gould had directed Dr. Peters to institute a search for comets, by carefully sweeping the most promising portions of the heavens, in order by some discoveries of this kind to obtain for the new Observatory a certain popular favor. Four comets appeared, and were detected elsewhere before his search proved successful; but at last a telescopic comet (1857, IV.) was found by him, two days prior to its detection in Europe.

This discovery, though not a very important addition to human knowledge, received the generous commendation of Dr. Gould, who considered that it would be especially gratifying to Messrs Armsby and Olcott, and might stimulate some liberal citizen to further donation. A different and adroit use of the circumstance, however, was made by Dr. Peters to advance his own interest, and he pretended to confer upon the celestial visitant the name of 'Olcott-Comet.' We say pretended, because he well knew the name could not be adopted. This ridiculous procedure was entirely unwarranted by astronomical usage, and the name has, of course, never been adopted by a single astronomer. Dr. Peters well knew that after the world had refused the honored names of Herschel and Le Verrier to the celestial bodies with which these names are indissolubly associated in history, it would hardly confer upon a telescopic comet the name of the then Vice-President of the Trustees.

Dr. Gould is the editor of the Astronomical Journal, and in his official capacity, although of course desirous of gratifying the feelings of Mr. Olcott, he felt obliged to change the editorial heading of the article to the words 'Fourth Comet of 1857,' although he left the words 'Olcott-Comet' in the body of the communication, which he generously published in Dr. Peters's behalf alone, without any allusion to their official relations."

53. *Newspaper Puffs.*

The Accusers, having remarked that "the importance of this discovery was, at the time, appreciated and acknowledged by the late Director, and Scientific Council," continue thus:

"The late Director was so highly gratified, that in another letter to a gentleman in this city, dated August 5th, 1857, he gives some hints for bringing the comet into notice, through items that would be 'snapped up by the press.' He says:

'Little notices of a few lines, conveying, each of them, some information relative to the comet, will be snapped up and run round the press, as items, when puffs would not; and it will be easy, with care, so to frame the language of a little paragraph, every two or three days, as to keep it before the public, without offending the tastes of scientific men. For instance, one paragraph could state that it is approaching both the sun and the earth, and will be nearest the one on such a day, and the other on such another time. Later, another paragraph might say how *bright* it is likely to become. Later still, that it passes so many millions of miles from the earth, at its nearest approach. *If it ever shows a tail*, this is an interesting fact. And into every one of these paragraphs, the name of the Dudley Observatory may be *unostentatiously* introduced, so as not to give the paragraph the appearance of a *puff* written for the purpose.'"

Good and honorable men will hardly credit their senses when they read what I actually wrote about this comet, and learn what value astronomers set upon the mere detection of one of these bodies. The Accusers carefully omit one paragraph in my letter, since it directly contradicts their statement, that the "importance of this discovery was at the time appreciated" by "the late Director."

What I wrote to Dr. Armsby, 1857, *August* 5.

Little notices of a few lines, conveying, each of them, some information relative to the comet, will be snapped up and run round the press as *items*, when long puffs would not. Among those ignorant of astronomy, the detection of a comet passes for a great feat, and it will be easy, *with a little care*, so to frame the language of a little paragraph every two or three days, as to keep it before the public without offending the taste of scientific men.

In like manner the word "long," qualifying "puff" is omitted, the word "little," qualifying "care," is also omitted; while italics of the original are put in ordinary type in the garbled copy, and *vice versa*. Without undervaluing the discovery, it, as every astronomer knows, was of compara-

tively small real scientific interest. I saw in it, however, a means of strengthening the Observatory in popular favor, of which I endeavored at once to avail myself. Does my letter indicate a want of interest in the welfare of the Observatory?

I believe that no one "acquainted with Dr. Gould's peculiarities" will consider a weakness for newspaper puffery as being among them. From my first connection with Messrs. Olcott and Armsby, up to the time when grave difficulties began to become apparent, this "hankering for print" on their part was my chief source of discomfort in Observatory affairs. My "press-copies" teem with appeals to them to say little and yet do much;—and scarcely an interview occurred between myself and Dr. Armsby without some appeal to him that he would refrain from carrying every little item of information concerning Observatory matters, to some newspaper for insertion. This disposition on my part, I believe, aided greatly in prompting the subsequent "determination to get rid of Dr. Gould."

The discovery of the comet furnished a legitimate and proper occasion to bring the Observatory into public notice. My suggestions to Dr. Peters, to search for comets, were given in order that such an opportunity might be obtained. But when I discovered the ostentatious way in which the thing was doing by Dr. Armsby, I appealed to him to use methods less repugnant to good taste; and thus wrote the passage of which a mutilated copy is given in the "Statement," to make me appear an advocate of that system of puffery, the tendency to which, I was striving to modify and control in Dr. Armsby, although the attempt to suppress it would have been most futile.

I had given Dr. Peters permission to prepare and print, at my expense, in Albany, a circular of the Astronomical Journal, making known the discovery. He availed himself of the opportunity to announce it in a style such as no circular or article of that periodical ever before or since exhibited. I translate a paragraph from a letter which he wrote me at the same time:

"Of course it must be intrusted to newspaper articles, (and the worthy man [Dr. Armsby] is already busy at these) to blow the trumpet more for the Observatory; and I may not of course do it in a circular intended for astronomers. I am already sorry for the closing paragraph, which would have been better omitted!"

This allusion to what "the worthy man" was doing, gave me, not unnaturally, some reason for anxiety; and it prompted to the dissertation upon the best style of puffery, if any style were to be employed.

54. *Gall and Wormwood.*

The Accusers go on to insinuate—and insinuation is their forte—that this discovery of a comet by one astronomer was gall and wormwood to another. And, with a view to make the public believe that I endeavored to transfer the discovery of the comet to myself, or that my friends desired to claim it for me; they say:

"How the discovery which had rewarded the long night watchings, and the zeal and energy of Dr. Peters, could be suddenly transferred to the 'masterly

inactivity' of Dr. Gould, and thus create *him* the discoverer of the 'fourth comet of 1857,' neither the Trustees nor the Press could understand."

I defy these men to prove by honest quotations of any kind, or in any other way,—that I ever claimed, or that my friends ever claimed for me any share in the merit of the discovery, such as it was. Let it be remembered that I had directed Dr. Peters to institute that very search for comets which was at last successful, and had lost no opportunity of commending him after he had succeeded. When a man endeavors to obtain scientific applause at the expense of honesty, he hunts somewhat larger game than this.

Upon pages 148 and 149, the Accusers go on in the same strain. They say:

"Most comets that have a known period as this has, bear the name of the discoverer, or of some friend or patron whom he desires to honor. Dr. Peters, had he been shrewd, would, at once, have decided that this 'new comer' should have been called the 'Gould Comet.' This would have been excellent. Or, h. might well have called it the 'Bache Comet.' No one would have doubted the fitness of such a name. Or, perhaps better still, it might have been called the 'Coast Survey.' But Dr. Peters, in his simplicity, forgot all these proprieties, and, as these Scientific gentlemen say, 'pretended to confer upon the celestial visitant the name of the *Olcott Comet*.' This they pronounce '*a ridiculous procedure*.'"

The first sentence of this passage is made up of compact falsehoods. The remainder needs no comment. It well illustrates the character of the authors.

55. *Resting on Oars.*

The Accusers say (page 43):

On the 21st of September, Dr. Gould, writing from Cambridge, says that nothing can be done on the clocks and dials, in consequence of Mr. Farmer's sickness, and adds:

"Now I suppose we *must make up our minds to rest awhile on our oars;* for in the present frightful pecuniary crisis, it will be futile to anticipate donations."

Surprised at the tenor and tone of this letter, and believing that in place of keeping up the continued cry of "Give! Give!" some effort should be made to obtain some useful results from the large amount of money already collected and expended, the Trustees felt constrained to express their disapprobation of this proposed "stop policy."

It may again be asked, why the Trustees did not take measures to terminate the "resting upon the oars," already too long protracted.

The alleged extract from my letter to Dr. Armsby with which this passage is introduced, is of course garbled,—although in this case it happens to contain but one fabricated and inserted word; and the garbling consists merely in taking two independent sentences, and by putting them together, and weaving them into one, creating a mutual relation which did not exist in the original.

The phrase "resting upon the oars" gives the Accusers a new point upon which they may hang their subsequently devised accusation of delay; and they proceed to use the phrase as a sneer. The accusation has been answered,—and my present purpose is not to harp again upon

this well-thrummed string, but to exhibit the falsity which pervades and permeates these Attacks.

Dr. Gould, writing on the 21st of September, 1857, said: "Now I suppose we *must make up our minds to rest awhile on our oars*;" and "the Trustees" were *surprised* and "felt constrained to *express their disapprobation* of this proposed 'stop policy'!" Let us see how they exhibited their surprise and made manifest the "disapprobation", which they thus "felt constrained" to express.

From a letter of Dr. Armsby, 1857, *Oct.* 1.

"Since the receipt of your letter of Sept. 21, I have been waiting and hoping, (almost without hope,) for something of a more cheering nature to communicate to you" . . . . . .

"Mr. Olcott informed me to-day that he had a letter from you, and one from Pistor and Martins, also; but I have not had time to call and see him. He is always so much hurried and crowded at the Bank, that I can hardly ever find him to talk with him alone. He is quite anxious to keep some one in the building, if possible, (as I have often heard him say) until something turns up that will enable the Observatory to begin its activity.

Your sincere and faithful friend,
J. H. ARMSBY."

From a letter of Dr. Armsby, 1857, *Oct.* 17.

"I have not heard from you for several weeks, except through Mr. Olcott, who showed me your letter in relation to the M. Circle. We are rejoiced to hear that it is so *nearly perfect*. Will it be sent on this month, or wait until the balance is paid for it?" . . . . . .

"Boston, I see, has not escaped the blighting influence of the panic. We have probably suffered less in Albany than most places. No failures or suspensions of any consequence have occurred. But another week would have tried our merchants and banks *sorely*, if the *general* suspension had not taken place. Peters says this is a "*poor*," "*very poor*" country—"all sham and show." The work on the Hill is now nearly completed. The gas house, and all but the works done. The painting of library is fine, and the exterior of the building is really beautiful. The brown stone color is a great improvement to the building, and gives satisfaction to every one. It seems to give weight and increased size to the Observatory. We are all glad this color was selected, as the effect is fine, and harmonizes beautifully with the stone porticos and trimmings. The new House is enclosed, and will go on more slowly in consequence of the pressure."

. . . . . .

"We shall be satisfied with whoever you may select for the present or temporary occupant of the Observatory, but hope you will be able to manage to keep it open, in some way or other, until something more favorable presents."

. . . . . .

"Everything is wonderfully improved since the painting. Let us be of "good cheer," and hope bountifully for the future. Let me hear from you as often as possible, and believe me as ever, and sincerely

Your friend,
J. H. ARMSBY."

On the 1st of October,—ten days after the "surprise," "constraint," and "disapprobation,"—Mr. Olcott wrote me that he was "willing to sink or swim" with the Council, and "we hardly dare ask you to take up your residence at once at the Observatory, though we think it would insure our success."* And five weeks later (Nov. 9) he wrote again:

"Whatever our Scientific Council decide upon, in relation to the Observatory, we shall deem the best."

What surprise! What a feeling of constraint! What mortifying disapprobation!

56. "*Give! Give!*"

Not only in the passage above cited, but in numerous other places throughout the volume, the Accusers allude to me or the Council, as greedy for funds. For what other purpose was the sneer, p. 36.

"At the same time, it is proper to state that Dr. Gould evinced commendable interest in the pecuniary affairs of the Institution."

And page 34:

"The efforts of the Trustees to raise funds, seemed now to promise so well, that the Scientific Council were animated with new zeal."

And page 35:

"On the 15th of January, 1857, Prof. Bache writes: 'Your subscriptions grow in number, indeed. May they reach your highest figure!'"

All who have read the history of the institution can see and feel the base ingratitude of these scoffs. The Council having undertaken to be responsible for the scientific character of the Observatory, provided the endowment should be obtained, and having relied upon the promises of the agents of the Board, that the necessary means could and would be collected;—now that these agents have spent for construction what was given for endowment, and no means approaching the requisite amount are at hand, the Scientific Council and myself are thus violently attacked,—both for delay because the activity did not commence without means, and for greediness because we expressed our hope that the means would speedily be secured. These men of dollars sneer at me as though I wanted the money for myself, when I speak of its importance;—they calumniate me as though I had squandered it for them, whenever they allude to their own expenditures. And, not content that all our labors should be gratuitous, and all our expenses personal, (except that bill at the Delavan House), they presume to talk about a cry of "give! give!" from a man who never asked them for anything, but had placed his own means freely at their call.

This is indeed a melancholy spectacle of ingratitude and defamation.

57. *The Practical Observer.*

The Accusers continue (page 43):

"THEY ["the Trustees"] had a PRACTICAL OBSERVER in Albany, READY to prosecute, faithfully and diligently, the OBSERVATORY work. His efforts were RENDERED FRUITLESS by the RESTRAINING CHECK held over him by an ABNORMAL "HEAD," EXERCISING AUTHORITY at a distance, and DISCOURAGING all work save that "in the PECUNIARY line;" PROLIFIC IN PROMISES, too, and BARREN IN PERFORMANCE."

In this passage,—which may well challenge comparison in the whole range of literature for the amount of direct and implied falsehood con-

densed within a given number of words,—I have called attention to several points by means of the typography.

It will be remembered that Peters stood in no official relation whatever to "the Trustees;" that he was an employee of the Coast Survey, attached to my party and stationed by me in Albany to attend to certain duties, not inconsistent with his other work of calculating occultations. It is now known that he was, as the Accusers *intimate, very ready* to enter the Observatory service, and occupied in intriguing against his benefactor, to accomplish this desired end. Yet at the same time, he was neither engaged upon work for "the Trustees," nor stationed in Albany at their call, nor paid by them. How then was the "restraining check" held over him? What do the Accusers mean by "an unofficial 'head?'" In what way was all work discouraged? What had Peters to do with the "pecuniary line?" Whether I was "prolific in promises," or "barren in performance," the readers of this book may decide.

The phrase "*practical* observer" is applied as frequently as possible to Dr. Peters, by the Accusers, throughout their publications;—to which of course I do not object. But they couple with this their favorite charge of incompetency against me. They intimate in various places, what they distinctly assert on page 22:

"That Dr. Gould's views were *theoretical* only, and that he was without practical experience."

In his Manifesto, Mr. Olcott, in the exuberance of his rhetoric and a reasm, endeavors to declare what I am and what I am not, by talking of another in the language of contraries. He says, speaking of Peters:

"He is not a specious, entertaining, pedantic theorist, abounding in contrivances of a useless and visionary character. On the contrary he is a ripe scholar, an accomplished astronomer, and can fathom with a profound mind the profounder depths of science."

There are certain persons in every community, who regard theoretical attainments as being inconsistent with practical ability. With such persons this mode of charging incompetency and discreditable characteristics may perhaps have some effect; at least this was the evident intention. Most persons regard work performed as a criterion for judging of relative ability to perform work. But Mr. Olcott, in his zeal to "crush," does not hesitate to pass his opinion as a definite verdict upon all the scientific as well as the other questions which can be brought into this quarrel.

58. *Quotations on page* 44.

From the "Statement," page 44.

"That barometer matter *it belonged of course to me to see about;* and it has not been forgotten at any time. But, expecting Mr. Gavit to act in the premises, delicacy prevented me from doing more than ask a question now and then, and I was under the impression that he was taking steps in the premises.

What I wrote to Mr. Olcott, 1867, October 3.

That barometer matter it belonged of course to me to see about; and it has not been forgotten at any time. Expecting Mr. Gavit to act in the premises, delicacy prevented me from doing more than ask a question now and then, and I was under the impression that he was taking steps in the premi-

"If you feel so earnestly about the suspension of activity at the Observatory, it shall not be *shut up*, if I can help it. Since I saw you, both Professors Bache and Henry have been here, and together with Pierce, we have had various talks about the Observatory. We find ourselves *entirely unanimous* on the subject. But while *all* entertain the same views which I expressed to you, adverse to any commencement upon an inadequate scale, and favorable to the policy of *awaiting a new flood tide*, we yet will none of us *urge the closing up* ENTIRELY, while you feel so strongly opposed to it as I infer from your letter. Consequently, I feel sure that Prof. Bache will authorise me to keep *some* ONE of my party there.

"There will be some difficulty in finding opportunity to train Observers; and those already accustomed to the use of the class of astronomical instruments which we ought to employ, are rare in this country, as yet. There are some advantages in employing foreigners, but these are usually more than counterbalanced by corresponding evils. *Furthermore, it is a little difficult to devise legitimate Coast Survey work, which can be done there without mounting the great instruments, and I would earnestly dissuade from this.*"

ses. Finding, when last in Albany, that he had done nothing, I mentioned the matter when writing to you."

If you feel so earnestly about the suspension of activity at the Observatory, it shall not be shut up if I can help it. Since I saw you, both Professors Bache and Henry have been here, and together with Peirce, we have had various talks about the Observatory. We found ourselves entirely unanimous on the subject; and while all entertaining the same views which I expressed to you regarding any commencement upon an inadequate scale, and inclining to recommend the policy of awaiting a new flood tide, we would assuredly none of us urge the closing up entirely while you feel so strongly opposed to it, as I infer from your letter. Consequently I feel sure that Prof. Bache will authorise me to keep some one of my party there. There will be some difficulty in finding opportunity to train observers, and those already accustomed to the use of the class of astronomical instruments which we ought to employ are rare in this country as yet. There are some advantages in employing foreigners, but these are usually more than counterbalanced by corresponding evils. Furthermore, it is a little difficult to devise legitimate Coast Survey work, which can now be done there without mounting the great instruments, and I would earnestly dissuade from this, until they can be intrusted to long experienced observers.

Still I think that all these obstacles may be met and obviated; and that you may rest easy on that score for some time to come. Should any interregnum occur for a few weeks, do not hesitate to regard it as altogether transient, whatever appearances may be. With Prof. Bache's aid, I will endeavor to make all right, and there is not the slightest lack of concert between us. He will, I am sure, render every aid, direct and indirect, even at some inconvenience.

The atrocious mutilation and falsification of this letter will be apparent at the most casual glance. The trickery of the Accusers in distorting sentences and remarks by the adroit employment of italics and capitals, to emphasize words which were not the emphatic ones of the original, is manifest. And, though it would be very desirable to call attention to the altered passages by some difference of type, it has appeared still more so, to place the original and the counterfeit side by side,—as they came from their respective authors.

The deliberate falsehood regarding a broken barometer, will be shown farther on, in § 121. The subject is too petty to be discussed twice.

Besides the omitted passages, which contradict the coloring which the Accusers have given to the extracted portions,—I ask attention to the change of "*regarding*" into "*adverse to*," of "*inclining to recom-*

mend" into "*favorable to*," of "*would assuredly*" into "*yet will.*" The omission of the little word "*now*" in the last quoted paragraph is very characteristic;—the omission of the final clause is more important though not more systematic. Throughout the entire "Statement," as I have often already remarked, I am accused, sometimes directly, sometimes by implication, of a determination not to mount the large instruments. To carry out their purpose of making this appear prominent, or else to avoid the implied contradiction to what they say I stated of Peters's "experience," the Accusers omit the words "until they can be trusted to long experienced observers." These men themselves, admit that at the time my letter, above quoted, was written, the Meridian-circle had not arrived from Germany; for, on page 48 of their "Statement," we have the following paragraph:

"On the 10th of November, 1857, the Meridian-circle arrived, and was laid away in boxes, with the Transit instrument, which had remained unopened for about a year. Both instruments, Dr. Gould had promised to have mounted nearly a year and a half before. Torpidity and inaction marked this epoch in the history of the Observatory."

The Accusers do not explain how I could have mounted an instrument which had not yet been received, or could have mounted, a year and a half before, an instrument which had been received only a year before. They perfectly well knew why the large transit instrument was not mounted, and why the one originally promised by Prof. Bache was employed. It was not advisable to mount so large and expensive an instrument until the Trustees should have raised the sum requisite for the establishment of a first class Observatory, and until a full corps of trained observers should have been ready to enter upon the systematic course of observations. I may here remark, for the benefit of the nine Accusers, and others ignorant of astronomy, that in the present state of that science, and in a first class Observatory, the Transit is used chiefly as a complement to other and more complex instruments, and is, by itself, of comparatively little value, for such work as can be done here now, except in determining time and investigating some few minor or unusual problems.

59. *Closing up entirely.—Astonishment of the Trustees.*

The simple reading of my real letter, just given, entirely disposes of the two pages of misrepresentation and mendacious comment by which its falsified version, on page 44, is followed in the "Statement" of the Accusers,—and fully exhibits the true character of the Attack and its authors.

It must be remembered that only "one subordinate of the Coast Survey" had been there, up to this time, and that no "closing up" or "suspension of operations" was proposed, as is evident, not only from the fact that no opening had ever been made or operations commenced, but also from the omitted passages of my letter. The unavoidable necessity of temporarily suspending the preparatory work has been referred to; but as for the renewed "surprise," "astonishment," "indignation;"—as for the "promises," the "adviser," the "scientific

COUNSEL," the "very respectable and gratifying income;"—as for the "earnest entreaties" and "expostulations of the Trustees," the "incompetency of Dr. Gould," &c., &c.,, these and the other similar falsehoods or false innuendoes have been already severally answered.

The "doorkeeper perhaps" (p. 45), is too petty an insinuation. Was Dr. Peters a "doorkeeper?" Are "doorkeepers" attached to the longitude party of the U. S. Coast Survey? The fling is contemptible. The Accusers cannot do anything in a large way. Even their spite is of the petty kind, when possible.

As an adequate answer to all this dissertation of the Accusers upon the alleged effect produced by my letter of Oct. 3, to Mr. Olcott,—let me quote the opening sentence of his reply, dated 1857, Oct. 6. It was thus:

"I have just received your favor of the 3d instant, and feel much encouraged by what you say concerning our Observatory!"

And the rest of the letter was in accordance with the feeling here expressed.

60. *Quotation on page* 46.

From the "Statement of the Trustees," page 46.

About this time, a letter was addressed by the President of the Board, to Prof. Bache, in which the facts that had been brought to the notice of Dr. Gould were urged upon his attention, and he was appealed to, to say whether the progress Dr. Gould had made at the Observatory, was such as the promises held forth had warranted the Trustees in anticipating. His reply was as follows:

"I am not conscious that, in my engagements, I have forgotten the encouragement given to you to act in regard to the Dudley Observatory. *It has so far been carried on by the Coast Survey.* My expectations in regard to the endowment of the Institution have, I dare say, been higher than, with less enthusiasm for the work and the men engaged in it, I should have entertained. Nevertheless, I cannot reproach myself with any want of frankness. We have all labored disinterestedly and with some energy, you most emphatically so. If our expectations have not been realized on either side, I doubt whether saying so to each other will advance the ends we have in prospect. I know it is so with myself, for I feel the last paragraph in your letter as casting a damper upon my future exertions, by the disp[illegible]sentiment of the past."

What Prof. Bache wrote to Mr. Olcott. 1857, *Nov.* 18.

"I am not conscious, that in my engagements, I have forgotten the encouragement given to you, to act in regard to the Dudley Observatory. It has so far been carried on AS OF the Coast Survey. ITS DIRECTOR AND HIS ASSISTANTS HAVE BEEN COAST SURVEY OFFICERS. MY TIME AND SERVICES HAVE, ON VARIOUS OCCASIONS, BEEN GIVEN TO YOU, WHEN, AND AS, THEY HAVE BEEN ASKED FOR. I HAVE NOT, IN ANY PART OF MY ACTIONS, SEPARATED MYSELF FROM, OR GONE COUNTER TO THE WISHES OF, DR. GOULD OR PROF. PEIRCE, WITH WHOM I CONSTANTLY CONSULTED ON ALL MATTERS RELATING TO THE OBSERVATORY. My expectations in regard to the endowment of the institution have, I dare say, been higher than with less enthusiasm for the work and men engaged in it, I should have entertained. Nevertheless, I can not reproach myself with any want of frankness IN STATING TO YOU WHEN CONSULTED, THE EXTENT OF ENDOWMENT NECESSARY FOR A FIRST CLASS INSTITUTION, SUCH AS YOU AND ALL CONCERNED IN IT DESIRE to found, and such as would be WORTHY OF THE DIRECTOR WHOM YOU HAVE IN VIEW. We have all labored disinterestedly and with some energy YOU MUST [illegible]ically SAY, AND

> if our just expectations on either side have not been realized, I doubt whether saying so to each other will advance the ends we have in prospect. I know it is so with myself, for I feel the last paragraph in your letter as casting a damper upon my future exertions by the disparagement of the past. I SHALL, HOWEVER, NOT ALLOW ANY SUCH MOMENTARY FEELING TO INFLUENCE MY ACTIONS, BUT SHALL CONTINUE IN FULL ACCORD WITH THOSE WHOM I KNOW HAVE THE INTEREST OF THE DUDLEY OBSERVATORY AND OF SCIENCE ENTIRELY AT HEART."

The letter to which this is a reply dated Nov. 14, was in no way such as the Accusers assert. It referred exclusively to Peters,—and contained no such appeal regarding "the progress Dr. Gould had made at the Observatory," as they now allege. The only allusion to myself in the letter is contained in these words:

"Dr. Gould left here this morning, and with your sanction, will place two persons in charge of the Observatory, and I hope they will be persons fully qualified not only to perform the work of the Coast Survey, but also to do something for the Observatory, to give it character and favor with the public."

And the letter closed with the following sentence,—to which the passage misquoted from Prof. Bache's reply exclusively relates:

"If you have, in your numerous and pressing engagements, forgotten some of the encouragements under which we have acted, you will pardon this allusion to them, and also the farther remark that I will hazard, in saying that our performances have more than realized our promises, and that we shall endeavor not to disappoint any expectations which we have authorized you to indulge."

Only one word was italicised in this passage of Prof. Bache's original letter;—but, in order to call attention to the gross mutilations and perversions it contains, I have distinguished some passages by small capitals. The most insidious changes are, as customary with the work of slippery tricksters, those which at first glance attract the least attention; and I ask especial attention to the passage which the authors of the pamphlet have put in italics, in order to make it the occasion for a subsequent sting of their benefactor. The Observatory had "so far been carried on *as of* the Coast Survey." How small a change—four letters into two—"*as of*" into "by!" Yet how great a flame they have striven to elicit from this little spark! It is the cunning of a sharp practitioner,—but not worthy of a Judge

Next, the entire sentence defining the meaning of these words "as of the Coast Survey" is suppressed; since, if honestly given, it would destroy the coloring so insidiously and carefully applied to this passage by the learned editor;—and especially *would have defeated* the object of the new version, "*You* most emphatically so."

Again,—immediately after the word "frankness," with which the Accusers represent the fourth sentence of the alleged extract as ending,

there were in the original forty-one words defining this "frankness," and intimately connected with it in the sentence. These fraudulently suppressed words would have made manifest what was the subject really under discussion; they would have illustrated the continual allusions to the endowment, which had been so confidently promised by Mr. Olcott, and the funds given for which had been unwarrantably disbursed; they would have defeated another purpose of the falsifier, which was to represent Professor Bache as endeavoring to *defend himself* against a *charge* of "want of frankness;"—and they would have shown the relations which actually existed between Mr. Olcott and myself, so lately as the time when this letter was written.

And finally the closing passage of the letter is omitted, because inconsistent with the comments of the Accusers, which are to follow. These remarks of the Accusers I will reprint:

"The Trustees had hoped that Prof. Bache would adopt a different tone, and when the grounds of complaint against Dr. Gould were brought to his knowledge, that he would have at least urged upon that gentleman, who was his subordinate in the Coast Survey, greater zeal and efficiency in the prosecution of the Observatory enterprize. They regretted to find that the charges against Dr. Gould were declared to be 'dampers' upon the 'future exertions' of Prof. Bache."

To give apparent existence to the pretended "charges against Dr. Gould," (which had neither been made nor implied) the Accusers now say, that the last sentence in their quotation from Prof. Bache's letter, referred to such charges, which were declared to be "dampers," &c. It is one of the boldest of Mr. Olcott's many falsifications when he speaks of the "complaint against Dr. Gould" in his letter of Nov. 14:—not only because I was not alluded to in it, except one very incidental mention; but also because in acknowledging November 23, Prof. Bache's letter of the 18th, he wrote:

"I certainly did not mean to complain of the past, for I regard our success thus far as transcending our most sanguine hopes at the beginning!"

See the remainder of this letter in § 66.

Now what was the "last paragraph" in Mr. Olcott's letter, to which Prof. Bache alluded? It was that very paragraph given above, which contained the insinuation *against Prof. Bache*:—"If you have in your numerous and pressing engagements forgotten," &c.; an ungrateful insinuation which Prof. Bache rebuked, in the passage just quoted, by a statement of his services, and by reminding Mr. Olcott that the promised endowment,—the condition precedent,—had not been forthcoming. What an exhibition of bad faith!

In this same letter Mr. Olcott had displayed his want of the first elements of astronomical knowledge, by mistaking longitude for latitude, and saying,

"What we now want, and immediately, is the determination of the latitude of our Observatory, to secure $2,000 which the Regents of the University are authorized to pay when the service is performed."

The latitude had already been determined under my direction.

Let the reader remember that the letter of Mr. Olcott contained no "charges" whatever against me,—no "grounds of complaint;" that no unimproved opportunity for "zeal and efficiency" had been exhibited and that even had there been such, the Coast Survey relations between Prof. Bache and myself would have had nothing to do with any reprimand or stimulus; Prof. Bache's office as a member of the Scientific Council having nothing to do with his functions as Superintendent of the Coast Survey. The closing remark of the Accusers, teeming as it is with a triple falsehood, is of course intended to bias the minds of those who may also have read the "Defence of Dr. Gould by the Scientific Council," by implying the existence of some overweening favoritism.

61. *Recall of Peters.*

From the "Statement of the Trustees," page 47.

On the 6th of November, Professor Bache wrote to Dr. Peters, ordering that gentleman to leave Albany forthwith, and report himself at Cambridge. Dr. Gould, on the same day, wrote to a Trustee:

"Prof. Bache has decided to detach Dr. Peters from my party. In the wisdom and policy of this course, I cannot but coincide."

The Trustees viewed the matter in a different light, and looked with dismay at the recall of Dr. Peters from the Observatory, for what appeared to them very insufficient reasons.

What I wrote to Mr. Olcott in a letter marked "Confidential," 1857, Nov. 6.

He tells me that he has decided to detach Dr. Peters from my party, and transfer him to Prof. Peirce's. (He has been doing a divided duty between us the past year.) In the wisdom and policy of Prof. B.'s course in this respect I cannot but coincide; and write to assure you that we shall use our best endeavors to make the new arrangements very satisfactory to you.

This subject has been sufficiently explained in Chapters IV and V of Part I, to which I refer the reader, after asking his attention to the phrases following the passage just quoted from the "Statement:" "apparent jealousy," "removal of Dr. Peters," "unworthy," "motives which prompted," &c. That Mr. Olcott, or in other words "the Trustees" had nothing to do with the arrangements of the Coast Survey,—of which they now assume to be judges,—that they were incompetent to judge regarding the causes which demanded the transfer of Dr. Peters, or the diligence and success with which scientific work was prosecuted,—and neither had occasion for "dismay," nor "looked with" it, nor felt it;—need no reiteration here. Their comments and their rhetoric in this connection are of a piece with those in other parts of the pamphlet. I will merely quote from Mr. Olcott's *reply*, November 9, to the identical letter which, as they now say, occasioned the "dismay."

"I have your esteemed favors of the 6th and 7th. Whatever our Scientific Council decide upon, we shall deem the best. . . . I infer that Prof. Bache intends to supply his place at the Observatory, and I have no doubt that the successor will worthily fill the place and prove entirely acceptable to us. . . .

"With very great and sincere regard, Dear Sir, yours,

"TH. W. OLCOTT."

And from a letter which Dr. Armsby wrote me, 1857, October 5:

"Peters says this is a 'poor, very poor, country,—all sham and show.' We shall be satisfied with whoever you may select, for the present, or temporary occupant of the Observatory; but hope you will be able to arrange to keep it open in some way or other, until something more favorable presents."

62. *Torpidity and Inaction.*

The Accusers begin their 48th page with more remarks concerning torpidity and inaction. Yet it will be remembered that I was not in any way bound to come at all to the Dudley Observatory. Neither myself nor the Scientific Council were ever committed to my coming, unless funds, yielding an income of from $10,000 to $12,000, were raised. These funds were not obtained. It was a voluntary sacrifice on my part, and in fulfilment of no pledge, that I agreed in December, 1857, to take charge of the establishment, with its avowedly exhausted treasury. It is as useless to charge upon me the delays incident to the manufacture of instruments and to the absence of funds, as it is to charge upon me expenditures which I never directed.

The Accusers endeavor to produce effect by the trick of making their falsification of Prof. Bache's letter of November 14, (of which they do not mention the date,) on page 46, precede the letter of Nov. 6, on page 47, and the notice of the arrival of the Circle Nov. 10, on page 48. But the exposure of their fraudulent mutilation and garbling will now prevent even the larger manœuvre, to say nothing of the smaller, from accomplishing its design.

63. *Ineffectual appeals.—Discipline.*

The attempt to make it appear that Dr. Peters was recalled from Albany to Cambridge by the Superintendent of the Coast Survey, because of "apparent jealousy" excited "by the terms of commendation in which the public press had spoken of" him, is ridiculous. He was an ordinary employee of the work, occupying no space in the eye of the public. He had neglected his duties as a computer, not furnishing his lists of occultations in proper time, and had applied for assistance in doing what his successor (a young American just out of college), has ably executed without help, and for less remuneration. He was under the direction of Prof. Peirce, who was of opinion that the work could not be attended to properly unless he came to Cambridge. On being ordered there he resigned, and though time was given him to consider his action, he did not retract his resignation. There could not be a plainer necessity for official action on the part of the Superintendent, nor a more absurd resistance to authority on the part of the computer. That the kindness of Prof. Bache induced him to explain his grounds of action to Dr. Peters, and the generosity of Prof. Peirce, led him also to discuss the propriety of his directions, when it was sufficient merely to state them, only shows Dr. Peters in a more unamiable light, as mistaking stubbornness for firmness. The attempt to justify a refractory subordinate who rewarded his benefactors with injury and disloyalty; and the remark about subjecting the Trustees to "discipline for their insubordination" is so puerile that I

wonder at it even in connection with so much which is malignant; thus speaking of a man whose assistants love him as a friend, as habitually abusing his power. To speak of an officer of a department, himself under authority, as being "accustomed to the exercise of arbitrary power," would be ludicrous, were it not wicked. The sympathy expressed for the "inoffensive Peters" is appropriately followed up by a denunciation of the citizens who have sustained the Council, as being "tools" of Prof. Bache's "proverbial sagacity."

64. *No Extenuating Circumstances.*

From the "Statement of the Trustees," page 49.

Dr. Gould, too, when appealed to, stood firm. He could see no extenuating circumstances in the case. He says:

"Dr. Peters was appointed in consequence of my intercession, against Prof. Bache's inclination. Now, after some fifteen months, he proves *disloyal*, declines complying with instructions, and complains of being treated as a mere computer; and Prof. Bache finds unexpectedly *an enemy and detractor*, where he was entitled to look for a grateful, devoted assistant."

What I wrote to Mr. Olcott, 1857, Nov. 20.

For me to urge Prof. Bache to take farther responsibility is out of the question. His contributions and exertions for the Observatory have been greater than your citizens probably comprehend. And it seems as though some adverse influence turned to his disadvantage everything which he has done for us. At present I am held responsible for what he had done to help Dr. Peters, a copy of whose letter to the Superintendent has been officially sent me. He was appointed in consequence of my personal intercession, against the Professor's inclination, and stationed at the Dudley Observatory upon my application. Now, after some fifteen months, he proves disloyal, "declines complying" with instructions, and complains of being "treated as a mere computer;"—and the Professor finds unexpectedly an enemy and detractor where he was entitled to look for a grateful, devoted assistant.

65. *Public Correspondence.—Reluctance to part with Dr. Peters.*

The Accusers say:

"On the 20th of November, a letter from the citizens of Albany was presented to Dr. Peters, expressive of regret at his intended removal.

"To this letter Dr. Peters sent an appropriate reply."

The letter to Dr. Peters,—prepared, as I am credibly informed, by the Hon. Ira Harris, the author in chief, and responsible editor of the "Statement of the Trustees,"—was an inflated eulogium, prepared at the instance of Mr. Olcott, for the purpose of creating the appearance of that "outside pressure" and "public opinion" which it was considered so desirable to bring to bear upon Prof. Bache and myself. Every good natured person, to whom it was handed, signed it when informed that it was intended merely as a kindly farewell to a person who had been at the Observatory for more than a year, doing acceptable service. His "appropriate reply" was "sent" somewhat more than a month afterwards, when an egotistical document, abounding in offensive innuendoes and

insulting allusions aimed at Prof. Bache and myself, was also published in the newspapers. In the preparation of this response, too, I am informed that the author of the letter to which it replied had some part; and it was to this document that reference was made in my letter, misquoted by the Accusers in the alleged speech of the late Mr. Wilder. ["Statement," page 66]. It was supposed that when a copy of this printed "letter" had been transmitted to Prof. Bache, he might "feel constrained" to reverse his action,—and a letter couched in "very humble" terms and assuming very great "humility," was addressed him by Mr. Olcott, urging that Dr. Peters might be permitted to recall his resignation. This, Prof. Bache was willing to grant, and so Mr. Olcott was informed at the time by a member of the Council; but that such permission must be followed by obedience of orders, was an indispensable condition, and this the "very humble" Mr. Olcott did not approve. In Prof. Bache's reply of Nov. 27, he first politely expresses his dissent from the humble position of Mr. Olcott, in the sentence over which, as a sweet morsel, the Accusers now gloat. (p. 49.)

66. *Denunciations by Prof. Bache and Dr. Gould.*

"But despite his professed regard for the President," say the Accusers, page 49:

"Prof. Bache, in his reply, grew more severe than ever in his denunciation of Dr. Peters, declaring that it was 'contrary to his own judgment' to employ him. So determined was his purpose, that he seemed impatient that any one, even the President, for whom he professed to entertain so great esteem, should dare interpose between Dr. Peters and the full measure of his vengeance."

And just below they say:

"On the 24th of November, Dr. Gould again writes in denunciatory language of Dr. Peters."

Let us examine the "denunciations,"—which like the "fulminations" on succeeding pages, seem to haunt the author's brain.

Mr. Olcott, who here again calls himself "the President," had in the letter of 1857, Nov. 23, already cited, written as follows:

"I readily confess to the importance of due subordination and loyalty,—and the confession involves the acknowledgement of my own transgressions in presuming to interfere, even to the extent I have, with the prerogative of others. For I am not, my dear Sir, unmindful of the humble position I occupy in this great scientific enterprise." . . . .

"I certainly was willing to co-operate with distinguished scientific men and was proud to enlist as a subordinate under your banners. It might never have been revived from the tomb of its repose, but through your inspirations,—and to this I alluded without intending offence when I spoke of our reliance on your encouragement. I certainly did not mean to complain of the past, for I regard our success so far as transcending our most sanguine hopes at the beginning. The services rendered by Prof. Henry and yourself in New York enabled us to gain a footing there,—and your identification with the enterprise has given it a passport to the confidence and regards of the nation." . . . .

"I would not interfere with matters concerning the progress of science, but with the pecuniary concerns. I should hope that I might in a friendly spirit make suggestions, without throwing a damper upon the exertions of any one, much less upon the exertions of those for whom, and under whom, I am

laboring. . . . . And with one or two assistants under Dr. Peters, we could keep it alive and before the public, until the Heliometer is finished, and Dr. Gould would be willing to identify himself with the Institution. And in the mean time we should be adding to our strength by fresh contributions."

And as a very significant postscript, he added:

"We are proud of the achievements and high character of the 'Coast Survey,' and if assailed we are ready with strong arms and warm hearts to do battle for it. We have friends at Court."

Prof. Bache, in replying, Nov. 27, wrote, besides the paragraphs quoted on pages 49 and 50 of the "Statement":

"It grieves me to think that you can so far misunderstand me, as to think that I do not appreciate your efforts in behalf of Dr. Peters; and it makes me like him the less, that he can have given so good and just a man a basis for hard judgement of one whom I supposed you only knew with favor from his disinterested desire to co-operate with you in a great work.

"I regret to find that my judgement of the character of Dr. Peters differs so much from yours. Into this it would be painful for me to go, but I may assure you that I appointed him on the Coast Survey to gratify Dr. Gould, and contrary to my own judgement, and I leave you to judge whether he has rewarded the Doctor for this friendly act, or has brought trouble and vexation to him. If Dr. Gould has not been restrained by the great desire to spare you pain, I am sure you are aware that his view of the case does not differ from mine." . . . .

"I supposed that Peters was interested in the Pleiades work, that he appreciated the advantage of his position with Prof. Peirce in regard to that work, and that he needed that employment, which was what I engaged him for. These arguments, a part of which you use, should have prevented him from suddenly throwing up his place and putting Prof. Peirce to the inconvenience of obtaining and training a new assistant. No sign has yet come from him of regret for his course." . . . .

"I am, my dear Sir, as ever, most ready to co-operate in the great work with you, and thank you kindly for your expression of good will towards the Coast Survey, the step-child of our Government."

What terrible "denunciations!" What insatiable "vengeance!"

The two paragraphs quoted from this letter by the Accusers are in the main correct. The word "convictions" is however substituted for "conclusions."

My own "denunciatory language of Dr. Peters" is contained in the following extracts from my letter of 1857, Nov. 24, to Mr. Olcott:

"Prof. Bache tells me that a letter from you leads him to suppose that the legislative appropriation may be secured by a thorough determination of the latitude of the Observatory. I apprehend, however, that this was a slip of the pen, for *longitude*. Otherwise our course is very easy. Nearly, if not quite, a year ago I requested Dr. Peters to make a careful and extended series of observations for the latitude of the Observatory, and obtained from the Coast Survey office and placed at his disposal for this purpose, an excellent Zenith Telescope and Transit instrument. The former of these is still at the Observatory, and the latter I detained until the middle of September, after all the observations were made." . . . . . .

"The series of latitude observations was very full, more than ample for the object in view,—and the original programme prepared here in Cambridge, though subsequently modified on account of the delay in completing the shutters, which prevented the observation of some of the stars selected on account of the advanced season. I have long been expecting a report from Dr. P., containing the definite computations and results."

"We have all of us in the Scientific Council regarded the Observatory as in the hands of the Coast Survey until arrangements upon a larger scale should supersede this. Upon this construction, there has been no difficulty in placing Coast Survey instruments there and using the means of the Survey in a great variety of ways. With any other understanding this would have been impossible; and it was from this point of view that I looked at the possibility of a telegraphic longitude connection. The recent singular course of Dr. Peters has apparently annoyed Prof. Bache more than I should have supposed possible for so small an affair; for he seems to have received an impression that his official action has been made a subject of criticism, and that Dr. P. has been representing, not without success, that the interests and aims of the Observatory and of the Survey, were not only distinct, but even divergent."

No wonder that such "denunciatory language" shocked the feelings of my tender-hearted and high-toned Accusers!

67. *Official connection with the Coast Survey.*

This subject has been very fully discussed in Part First, pages 61, 69, as also incidentally in this Part Second, and needs nothing more here.

The attempt to make me appear guilty of falsehood, because, in Nov., 1857, when the Observatory was a Coast Survey station, I spoke of it "as in the hands of the Coast Survey;" and in the spring of 1858, after the compact, denied that there was any "official" connection between the two institutions, has also been exposed. "Defence" § 23. See also this Reply, § 60.

68. *Secret appointment of Peters in December*, 1857.

The Accusers state (p. 50):

"When the 1st of December came, Dr. Gould being still absent from the city, Dr. Peters was requested to remain at the Observatory and take care of the costly instruments and property there, until other arrangements could be made."

Those who have read the close of Chap. IV, and the beginning of Chap. V, of the First Part are aware that no information was ever given me or any of the Council, relative to the alleged "request" of "the Trustees" to Dr. Peters, that he would remain. The only information ever given me upon the subject was contained in Peters's own note of Jan. 7, previous to which time I had not suspected this double dealing on Mr. Olcott's part,—for he was the person chiefly known as "the Trustees," no meeting of the Board having been held during the interval. A janitor resided in the building;—no "costly instruments" or "property" were exposed, nor did they require or receive "the care of Dr. Peters." It was a simple question of domicile. [See pp. 63, 64.]

After the proceedings of January 9 and 19, Mr. Olcott had asked my consent to Peters's remaining, as an act of kindness, and this consent had been promptly and cordially given. Since Dec. 1, I had visited Albany three times, and Prof. Peirce once; but the existence of such an arrangement with Dr. Peters had been intimated to neither of us. This secret employment of the man was, if real, an act of indecency towards the Scientific Council, and especially towards Prof. Bache and myself.

69. *Visit of Prof. Peirce in December.*

The motives of Prof. Peirce in this visit were two-fold. In the first place Peters had retained the occultations and other computations which he had been engaged in making under Prof. Peirce's superintendence, and although his connection with the Coast Survey had ceased Dec. 1, the official directions of the Superintendent and the requests of Prof. Peirce for the delivery of the papers had been disregarded in the same manner as he had failed to comply with the similar directions for the delivery of the observations and computations for the latitude and longitude of the Observatory. In the second place, the course of Mr. Olcott relative to Peters's withdrawal had been such, that,—since at the time none of us doubted his truthfulness, sincerity or honor,—Prof. Peirce supposed a simple oral statement of the true relations, a statement which (notwithstanding what the Accusers now assert regarding my "denunciations,") I did not wish to make,—would show Mr. Olcott the misapprehensions under which we thought him laboring. It was during this visit that a question of Mr. Olcott regarding "the Professorship at Columbia College" led to the full explanation mentioned by the Council in the "*Defence*," § 6, and alluded to in § 32, p. 216 of this Reply. Prof. Peirce found the calumnies against myself and Prof. Bache already in circulation, and so informed me upon his return, and advised me to go on to Albany in person, at once. Accordingly I wrote to Mr. Olcott, 1857, Dec. 12, to inform him that I should come within a few days. The letter contained a passage (incorrectly given by the Accusers, p. 51) one sentence of which was:

"I regret that the course of the current, *which seemed running so smoothly a month ago*, should have changed to the degree which he describes."

The Accusers have quoted this, and even italicised the clause as above, without observing how thoroughly it contradicts their assertions about the dismay which they now represent as having prevailed among "the Trustees" five weeks before, and their false assertion upon page 46 of their "Statement" that Mr. Olcott had, in a letter to Prof. Bache, complained of my course. (See § 60, p. 253).

70. *Report to Scientific Council.*

In the "*Defence*," § 4, the Council quote from my Report of Dec. 21,—which Report, like everything else which I have done or can be made to seem to have done, forms the basis for an attack. They speak of the fact that "the Trustees were entirely ignorant" of it, as though it were the duty of the Scientific Council to exhibit the minutes of all their meetings, and to communicate all their Reports to "the Trustees." This is part of the present scheme for representing the Council as having been an "advisory" body,—and without an independent organization. The Scientific Council held regular meetings in due form; and besides this report of Dec. 21, 1857, I submitted seven others previous to our attempted expulsion in June and July;—and in these reports had informed them of the progress of affairs,—and of the encouragement

and the obstacles which presented themselves. I will refer to the "*Defence*" for the extract cited which the writer of the passage in the "Statement" now professionally calls "a species of indictment." And although it seems to the Accusers very proper for them publicly to declare me responsible for expenditures which I neither made, nor advised, nor approved, and to send out twenty-five thousand copies of their declaration,—it is yet imputed to me as a heinous offence that I had expressed in a business report to my colleagues, the fact of my anxiety and embarrassment at the "lavish and injudicious expenditures of Dr. Armsby." It will be borne in mind that this extract from my Report of Dec. 21, 1857, was not published by the Council until July, 1858,—after Messrs. Olcott and Armsby had conceived and executed the iniquitous design of declaring me responsible for the pecuniary mismanagement; an idea which had not occurred to them, or at any rate had not been suggested by them, until late in the spring of 1858.

71. *Slandering and Maligning.*

"It will be remembered," say my Accusers, page 51,

"That Dr. Gould, in several previous letters to the Trustees, as well as in the last, had professed entire satisfaction with all that had been done by them;"—

and on page 52:

"When all the history of Dr. Gould's connection with the Observatory is borne in mind—when his letters from which we have quoted, making promises, drawing upon the funds of the Institution, ordering experimental instruments, and professing, not only entire satisfaction, but enthusiastic admiration, for the course of the Trustees, are remembered, what interpretation can be placed upon this remarkable document? For a year past, while making all these promises and professions, he had been thus slandering and maligning the Trustees to his *most intimate friends*. If facts can ever be significant of individual character, they must be so in this instance."

The letters from which the Accusers have "quoted," the "promises," the "drawing upon the funds," the "experimental instruments," have all been considered by me in their proper places. It remains to say a few words of the "professing not only entire satisfaction, but enthusiastic admiration, for the course of the Trustees,"—and of the "slandering and maligning," "for a year past." And my object can hardly be accomplished in a better way than by quoting from a letter which I wrote and sent to Mr. Olcott, a little more than a year previously,—and the reception of which he has acknowledged. The character and amount of the "slandering and maligning" of Dr. Armsby,—or as the Accusers here call him, "the Trustees,"—may be understood from the perusal of this letter, which is in the same tone as all my complaints of Dr. Armsby, up to the difficulties of Dec., 1857.

Letter to Mr. Olcott, 1856, *Nov.* 3.

"I had made up my mind to write you to-day, even before receiving yours of this morning. The truth is, I fear things are going on, all wrong, on the hill. And because important steps are decided on without sufficient reflection, or without an understanding of the matter, or from the impulses of the moment. You will agree with me that there must be *one* head, if things are to go on harmoniously. I love, honor and respect our dear friend, the Doctor, too much

to say a word which could give him needless pain,—but cannot longer doubt my duty to let you know that things are in a very bad way. Were it possible, I would not hesitate a moment to volunteer my services in coming on instantly and assuming the direction of things, should you be disposed to intrust them. Indeed, I had supposed every end attained in exercising guidance from here; but this does not work, for, with the best intentions all round, my counsel seems to be quite without weight, when any different proposition follows it from another. And the fate of all my plans reminds me of the great stones which can so easily be started down hill; but, after that, neither guided, nor restrained, nor stopped at the right place. Of course the explanation is palpable.

I understand the state of things, and am aware that you must; and am far from writing in irritation of any kind.* All the trouble comes from having "too much of a good thing,"—and certainly too much is better than too little.—So do not think me *touchy*. But will it not be best to stop things for a while where they are? The Kingston stone project was directly in opposition to my advice, though of course I tried to help along when it was too late to remedy. So too with other matters, the shape of the building, the site, &c., &c. You ought not to be troubled with all this, and should not be, were it not wrong for me to be longer silent, while you are relying in some measure upon me. As for ——, I warned against him in JULY, and proved, as I thought, how untrustworthy he was, but the Dr. appealed to me so earnestly not to mention it to you that I abstained. Now the dismissal of —— appears to me a mistake of the first magnitude; for though he was occupying a false position in some respects, his fertility of device in overcoming existing obstacles was a great support. *We could not have got along without him;* and his loss is still a severe one. He has, I fear, been made the victim of other men's knavery. Had I been consulted in the premises, or even suspected that such a step was meditated, I would have made all this clear to you and the Doctor—Peters is in a state of excitement which most certainly impairs his usefulness to a very great extent, and I am thinking of withdrawing him, chiefly for his own sake. The builder, architect, contractor, astronomer, are all in trouble. And the one, single, only, reason is that our friend* acts incautiously or from a half knowledge,—and does not let his judgement keep pace with his zeal.

You will have understood about the calculating engine. It would indeed be a treasure, a source of real glory, pride and honor to the Observatory—hardly to be over-estimated; but I would certainly not have suggested the *spending* of money, when you need to raise it.—And had it not been for the hope of diverting that active mind from the Observatory into a more congenial and useful channel. Too late, however.

Mr. Hague writes to-day half acknowledging the failure of his plans at Kingston, and asking advice. I shall reply, declining to give it; for I see in every new plan at present, merely the repetition of past embarrassments. *There must be responsibility somewhere*, if the matter is to be brought to a successful conclusion. And responsibility will not be obtained without a corresponding delegation of power. To go on under present arrangements would, I fear, be to go on wrong, doing what would have to be undone again. My present suggestion would be to cover in the building roughly *as it stands* and stop for the winter. Present discordances will grow softened by time, and we know by experience how soon one *unchangeable* plan may be superseded by another, more manageable, one. Meantime plans can be arranged, so that nothing but their simple execution will remain; and the interest money of your fund may accumulate enough to cover the depredations already made.

You see, my dear Sir, how frankly I write, and will understand my feelings, and my regret at what may give you annoyance. Still these little troubles are trifling compared with the splendid end we have in view, and it could not be expected that the course of any great enterprise would "run smooth" in all respects. You have a glorious institution in sight, and as brilliant success, I doubt not, as you can desire. Please destroy this sheet, that it may never be the source of annoyance to our good friend. I wrote him on Saturday at great length and as strongly as seemed safe, not to wound his feelings. Perhaps he will read the letter to you.

* Dr. Armsby.

From Mr. Olcott's Reply 1856, *Nov.* 5.

"Our mutual friend occasionally manifests displeasure when I resist with decision some of his suggestions and plans. . . . . He is, I know, most anxious to meet your every wish; and you must bear with the fertility of his genius as manifested in abounding schemes, numerous plans and various enterprises. They are all respectively excellent, but rather difficult of simultaneous execution. . . . . I have destroyed your letter, as requested, and shall be glad to hear from you if I can in any way be of service. The Doctor has more constant intercourse than I have or can have, with the Observatory, Peters, &c., and will I am sure carry out any suggestions which you may make."

I think these extracts will speak for themselves. My letter is a specimen of the intensest "slandering and maligning," in which I indulged!

72. *Reference to Council.*

"About this time, much public feeling being enlisted in behalf of Dr. Peters, the following letters passed between Dr. Gould and the other members of the Scientific Council, which, as now appears from the report of December 21st, already alluded to, was a mere formal, or Pickwickian, official correspondence, designed for effect."

Thus say the Accusers (pp. 52, 53.) The circumstances of the case have been already narrated in full. Even after the formal acceptance of Mr. Olcott's first proposition of Dec. 21, both by myself and by Prof. Bache for the Council, a proposition involving such hard terms, and implying so much sacrifice on my part, that Mr. Olcott probably did not deem its frank and complete acceptance, possible,—even after this compact (which effectually and designedly relieved the Observatory from the embarrassments growing out of the intrigue with Dr. Peters,) had been made and acted upon on both sides—the appointment of this person was again urged upon me. This new attempt, the whole design of which I did not then comprehend, but which seemed to me to break through every limit of decorum, decency and fairness, I resolved to bring to a final conclusion by referring again the whole matter to the Council, and being guided by their decision. On the same day, 1857, Dec. 23, I sent them from Albany my request for their official advice, ["Statement" p. 53,] and on receiving at Cambridge their reply, I inclosed it immediately to Mr. Olcott, together with a copy of my own letter. These are given by the Accusers correctly on pages 53 and 54.

73. *Offer of place to Dr. Peters.*

A kindly and most undeserved act on my part, in offering to aid Peters, is tortured into the semblance of a tricky manœuvre.

The Accusers professing to quote an alleged speech of the late Mr. Wilder, say, page 66:

"But only two days after this expression of his lack of faith in the trustworthiness of Dr. Peters, when Dr. Peters was found to be too much of a MAN for Comet Survey purposes, wishing to get rid of this great trial of his faith and patience, and having grace "to bear other people's trials with Christian fortitude," he sent to Dr. Peters a communication, tendering him a position *away from Albany*, at a salary of $1,200 to $1,800 a year!"

And on page 54, the Accusers also say :—

"Of this letter Dr. Peters took no notice, understanding the spirit that dictated it."

For four years, every step of Dr. Peters, previous to the last fatal one, had been made through my agency or after consultation with me. His emigration to America, his appointment as aid in the Coast Survey, his income from private computations, his stationment in Albany, the increase of his pay, the supply of a dwelling, furniture and fuel for him in the Observatory, the offer of a place under Lieut. Gilliss,—all had taken place through my participation. I had discovered, too late, that he was not the single-hearted person I had supposed; yet had not made this discovery an occasion for unkind treatment. To the very end, I treated him with kindness, and up to this day at which I write, in Dec. 1858, have not returned him evil, for his evil and his ingratitude. I had declined appointing him my assistant, under circumstances already known to the reader;—but had offered him every aid in my power. Three weeks earlier, when he had spoken of desiring to join an expedition to South America, I had promised to assist him in any desired way, and on the 23d of December,—the very day on which the letter cited in the last section was addressed to the Scientific Council,—had invited him to remain in the Observatory "for the present." He declined at once; saying that he should under no circumstances be willing to remain at the Observatory, and that a position had been already promised him upon the Mexican Boundary Survey, at a salary of $800. On returning home the next night, I found unexpectedly a letter asking the nomination of some person competent to serve as an assistant in the Northwestern Boundary Survey (not "in the Northwestern Boundary *Coast* Survey," as the Accusers ingeniously make it on page 66); and on the next (Christmas) morning, at once wrote to offer it to Dr. Peters. Such was the "persecution of Dr. Peters" of which the Accusers speak on page 52! The letter, with some slight alterations, such as changing "Dear Doctor" into "Dear Sir," is given on page 54 of the "Statement." It offers a position, worth from $1200 to $1800 a year, in Washington Territory, to a man who had, two days previously, represented himself as anxious to obtain a precisely analogous one at $800 in New Mexico. But there was another feature of my proceeding which the Accusers very naturally do not mention. This letter to Dr. Peters was inclosed in one to Mr. Olcott, referring to it thus :—

"I also inclose a letter addressed to Dr. Peters. Since leaving you yesterday, it has struck me that it might not improbably afford you gratification to be able to confer some comparatively lucrative place upon Dr. P.;—as also that in his present state of feeling it might be more acceptable to him, if supposed to come from some other than myself. In case I am right in this, may I beg you to suppress my letter to him and make use of the facts which it contains to offer him *your* services, while informing him of the opportunity. My agency in the matter will then remain unknown to him, and I am quite sure that my intercession would secure him the place."

What a return for such an act is the declaration that this was done to "have Dr. Peters out of the way!"—It must be remembered that this

connection with the Coast Survey was closed, that he was temporarily residing in the Observatory as I supposed, upon my tolerance and expressed assent; that his surreptitious appointment as "an Observer" was more than a fortnight afterward; and that no suspicion existed that the compact, which had already been closed and acted on, could be deliberately violated.

But there is still more to be noticed. The Accusers in introducing my letter to Dr. Peters say:

"Only two days later, he addressed to that gentleman, who had been so recently denounced as treacherous, incompetent, and utterly untrustworthy, the following note:"

My language regarding Peters had been as follows,—and is quoted by the Accusers both on page 58 and page 66:

"His [Dr. Peters's] course towards the *Coast Survey* having been such as to impair my confidence in his trustworthiness; and his subsequent action ill-calculated to restore it."

"Denounced as treacherous, incompetent, and utterly untrustworthy," say the Accusers!

The motive of this rather strong rendering is to make my offer to Dr. Peters—of just such a place, as he had been anxious to obtain, with duties precisely adapted to his attainments and his character,—and under military command, appear inconsistent with my opinion of the man as expressed to the Scientific Council.—Such are the arguments, such is the candor, such is the temper of my Accusers.

74. *Prospects in December.*

The authors of the "Statement" continue:

"In the meantime the prospects of the Observatory grew darker every day." This "meantime" refers to the period between Dec. 25 and Jan. 1; the period immediately following the proposition of Mr. Olcott which he professed to think was "broad and full and embraced our mutual obligations," which had just been definitely accepted, in "broad and full" terms, and in a manner legally binding! And upon which I had promised and was preparing to transfer my residence to Albany, just so soon as the premises should be ready!

The Accusers proceed to depict anew the melancholy aspect of affairs, and close with the following incredible falsehood, page 55:

"The two propositions of Mr. Olcott, made to Professor Bache, either that Dr. Gould should himself come to Albany, and take immediate charge of the Observatory, or that his advisory character should still continue, and that Dr. Peters should be a resident Observer, his salary to be paid by the Trustees, were unanswered."

Lest the reader may think his memory or his eyes deceive him, I will repeat that the conversation with Mr. Olcott, in which the so-called "propositions" originated, was on Dec. 18; that I left the same evening for Washington,—Mr. Olcott's letter of propositions to Prof Bache being written the ensuing day, Dec. 19; that on the 22d I returned to

Albany and gave an unlimited acceptance (Prof. Bache's letter accepting in behalf of the Council, being sent at the same time); and that my assistant under the new arrangement arrived from Cambridge at Albany on the same day. Yet now, speaking of a period a week later, these Accusers deliberately make the assertion that Mr. Olcott's propositions "were unanswered!"

75. *The Memorial.*

The Accusers assert that on the first day of January, "the Trustees" received the document printed on page 55 of their "Statement."

Whether this is really the document which they received, signed by the gentlemen whose names are now affixed to it, it is impossible to say, for the original is in the Accusers' own keeping. Our information on the subject is confined to their declaration and to the "argument from analogy." But that they received it on the first of January is certainly untrue. The signatures which were given, were obtained by the personal solicitation of Dr. Armsby and others, at the instigation of Mr. Olcott. For farther information regarding it I would refer to page 64 of this Reply, and to the letter addressed by Mr. John V. L. Pruyn, one of the signers, to the Albany Atlas and Argus, of 1858, Oct. 6, and reprinted in Mr. Thacher's "Key to the Trustees' Statement."

With characteristic effrontery the Accusers now claim that, in appointing Dr. Peters an observer, they were moved to action by the request of the citizens who signed the letter. And they say, (alluding of course to some of the signers of the address to the citizens of Albany, from the committee appointed for this purpose by the public meeting of July 13):

> "What, then, can be thought of the "consistency" of those who are now found condemning the very action which, six months before, they themselves had declared to be vitally essential to the very existence of the Institution?"

The signers of the address may well reply:—What must we think of the "honesty" of men who prepare in their own closet artfully worded "documents" addressed to themselves, obtain by false representations our signatures to these documents, and then claim to act in compliance with our wishes, when in reality they are only carrying out their own designs,—designs of which we have been made the dupes and the unconscious instruments?

It will be remembered, as I have stated elsewhere in this Reply, that some of the signers of this document soon discovered the false representations under which their signatures had been obtained, and at once took measures to withdraw their approval. Yet their names are now paraded by the Accusers on page 56 as indorsing the document, and some of them are again selected individually on page 58 of the "Statement" to be named as the men whose advice the Trustees followed!* Such dishonesty demands the most unsparing and unrestricted condemnation. Yet it hardly suffices for a type of the falsehood and shamelessness of this work of my Accusers.

* Among these, were also Messrs. Cooper and Townsend, whose names I here mention in addition to those already cited, because they are individually named by the Accusers.

76. *Appointment of Peters in January.*

On page 57 of the "Statement" is an account of the appointment of Dr. Peters "as an observer." This matter has been so fully discussed in Part First, that it is unnecessary to enter again into the history of the matter here.—The presiding officers and other Trustees who were present have assured the Council that the resolutions were neither passed nor put to vote, but suppressed in consequence of the vigorous opposition which they encountered from gentlemen like Messrs. Van Rensselaer, Prentice and Wickes.—Yet the Secretary notified the Council, and the Accusers boldly assert, not only that they were passed, but that they were passed unanimously!

Of the reply said to have been returned by Dr. Peters, dated on the same day, and given on pages 57 and 58 of the "Statement," I will only say that Messrs. Olcott, Armsby and Pruyn, informed Prof. Bache and myself, Jan. 18, that no acceptance from Dr. Peters had been presented to the Trustees.

The Accusers close their account of this election of "an Observer" with the following spiteful remark:—

"Official copies of the resolutions of the Trustees having been forwarded to the members of the Scientific Council, they very promptly made their appearance in Albany."

Of this I will only say that Professors Henry and Peirce received their copies in Albany, January 14, after their arrival, and Professor Bache and myself not till after our return home from Albany, which we left on the 18th and 21st respectively. Such things are almost too small to notice;—but my purpose is to be thorough. The several members of the Council came to Albany upon unofficial information of the course of the Trustees.

77. *Severance of relations with Council.*

The Accusers say, on page 58, that "a crisis in the affairs of the Observatory had now been reached;" that "the Trustees in following the advice of" certain gentlemen, (naming some of those whose names had, as already described, been obtained under false pretences)

"Had appointed their own Observer, and he had signified his acceptance. This step, unless recalled, would, as urged by the Scientific Council, and admitted by all, operate effectually to sever the relation between the Trustees and the Council. The Trustees now occupied a perfectly independent position; a position they had assumed upon mature deliberation, and which they felt able to maintain."

In short they distinctly assert that they intended at that time "to sever the relation between the Trustees and the Council." The position, thus deliberately taken, represents "the Trustees" as resolved to annul a compact, by the act of *one* of the contracting parties alone, and Mr. Olcott's anxiety to escape the odium of an act so base and so indefensible, may, perhaps, be sufficiently shown by a few words from his letter of 1858, Jan. 23, to Prof. Henry:

"I am sorry that we can be supposed capable of disappointing the expectations which we authorized you to indulge, and which our honor is concerned in maintaining.

"I assure you that I know of no single occurrence which I can construe into "a want of good faith on our part. When such a charge can be made against "me, I shall expect to forfeit the honor of subscribing myself, as I now do,

"Your sincere friend,

"THOMAS W. OLCOTT."

The public will judge of the extent to which Mr. Olcott has forfeited this particular honor, as also all claim to honor of any kind, by his course in this matter.

78. *Assembling of Council in January.*

"Upon their arrival in the city, the members of the Scientific Council besieged the Trustees, and persistently and earnestly entreated them to reconsider their action of the ninth of January. They bitterly, and, as the Trustees believed, very unjustly assailed Dr. Peters, both in his private character, as a man of honor, and in his public standing, as a man of science. Their personal influence with the Trustees, and their reputation as scientific men, were brought to bear against the newly appointed Observer. It was represented to them by the Trustees, that Dr. Gould had greatly exceeded his authority and misunderstood his relations towards the Trustees, in refusing to recognize Dr. Peters as their employee, and demanding from him possession of the Observatory, which they had placed in his keeping. The Council asked for a hearing for Dr. Gould, which was at once granted."

Thus say the Accusers on pages 58 and 59. Few more thorough tissues of misstatements and scandalously false assertions occur in the entire book. To correct these untruths it would be necessary to reprint the passage inserting a negative in every clause.

The Accusers assert too, that by refusing to recognize Peters as their employee I had given reason for complaint. Yet I had, until January 7, never suspected such a relation to exist; upon its avowal I had left the city at once without communicating with any of the persons concerned, the "document" or memorial already alluded to had been circulated wholly unknown to me on the 8th; the meeting of the Board and alleged election of Peters had been on the 9th;—the Council had unofficially learned this action on the 11th; and on the 13th Professors Henry and Peirce were already in Albany, where I arrived again on the 14th. So that I had no opportunity, at the time mentioned, to refuse to recognise Dr. Peters as the employee of the Trustees,—even had I been so inclined. Whether such a refusal would have been proper, under the circumstances, is therefore a question which requires no discussion.

Professor Peirce, immediately after his arrival in the city, on the 14th of January, addressed the following letter to the President of the Board:

"Dear Sir—The Scientific Council of the Dudley Observatory have received from the Secretary of the Board of Trustees a copy of certain resolutions purporting to have been adopted at their recent meeting. They have, on the contrary, been informed by yourself as the President of the Board, that the said resolutions were not adopted, but that quite a different communication, which is irreconcilable with the adoption of the resolutions, was agreed to be made to the Council. No such communication has of course been received by the Council. On the part of the Scientific Council, therefore, and in their name, I request you to call a meeting of the Board of Trustees, in order that during the present meeting of the Council in Albany, any question may be discussed and decided in which they may be interested.

"With sincere respect, &c."

and upon this application a meeting was called by Gen. Van Rensselaer for Saturday, Jan. 16.

Of this the Accusers say:

"The Council asked for a hearing for Dr. Gould, which was at once granted!"

I returned to Albany on the 14th in compliance with a letter from a friend not of the Council, and Prof. Bache was summoned from Washington by a telegraph, informing him that the meeting had been called. He arrived on the 16th, during the meeting, after a journey of twenty-one consecutive hours, and came without rest or refreshment directly from the railroad station to the office where the Council and Trustees were in conference.

79. *Complaints of Inactivity. Assertions on pages* 59 *and* 60.

Revolting as is the task of unveiling and exposing such a record of human debasement as this unprincipled and ruthless collection of misstatements,—there are few passages so thoroughly sickening as these two pages.—How men with souls, and moral responsibilities, could have ventured upon such reckless disregard even of the semblance of truth;—how men occupying stations of responsibility and coveting others;—how men who are to look their fellow citizens daily in the face, could plunge into such an abyss of falsehood, where they should have known that their detection was sure—almost surpasses comprehension.

They thought that I had no documentary evidence to prove their forgeries upon them; and they supposed that I should be so thoroughly and completely "crushed" by the tremendous weight of their specious and unnumbered falsehoods that the power of speech would be gone from me; and that too, even though men should be willing to grant me a hearing. But, thank God, He has given me strength to speak, and defenders and champions have arisen where they were least expected; and when I leave this world it shall be with an unstained record, and with a vindicated honor.

No such "explanations" were given to the Council as the Accusers now assert.

No declaration was made that such "inactivity" "could no longer be tolerated."

No Trustee dared to tell the men who had lifted the Observatory from the dust that they were merely wishing "to hold positions of honor in the Observatory."

The question of "putting it operation" was not mooted;—for it had been decided already by the compact three weeks before.

No man hinted to the Scientific Council that "the relations between them and the Trustees must terminate," but the Council did declare that unless the scandalous violation of faith should be retracted, their withdrawal would follow at once.

The Council offered no pleas "in extenuation" of my "inaction," nor did they apologize in any manner for my course, for they approved and indorsed it.

They did not urge the Trustees to appoint me "Director," for I was

already "in entire charge of the Observatory, subject only to the Scientific Council."

They gave no pledges in my behalf, for "energy and perseverance."

They neither heard of, nor acknowledged any inertness and neglect in the past.

They never spoke of themselves as the "scientific advisers of the Trustees."

They simply demanded the fulfilment of Mr. Olcott's violated pledges, and the opportunity to meet the full Board.

The Accusers close page 60 with the extraordinary declaration that so lately as January 16, 1858, they were:

"Even willing to hope that, after all their experience to the contrary, Dr. Gould might prove a man of practical ability, if he should remove to Albany; and his efforts thereafter be faithfully directed towards the interests of the Observatory."

And this after all the pretended deception, mismanagement and untruth of which they now allege that they then knew me to have been guilty.—What a confession! This pretended hope is offered as a dishonest cover to conceal the utter baselessness of their charges against me.

80. *Meeting of January* 16.

An untruthful account of this meeting is given throughout;—the account extending over more than seven pages (61–68) of the "Statement." This includes somewhat more than three pages of the alleged speech of Mr. Wilder, which will be considered by itself in § 82. The accounts of the meeting given in different parts are by no means perfectly consistent; as has been shown already to some extent (p. 67.) Upon page 61 the Accusers say, that the members of the Council—

"severally addressed the Board; Professor Henry in a strain of highly impassioned eloquence; Professor Peirce more coolly and dispassionately, admitting that the power was all in the hands of the Trustees, that the Council was simply advisory, and its continuance, at the pleasure of the Trustees."

On page 67 we read of the same address:

"Prof. Peirce, in an earnest and impassioned appeal to the Board, stated his opposition to Dr. Peters to be based purely on scientific grounds; and, among other things, dwelt at length on Dr. Peters's inability to understand or use the Heliometer."

But on page 59, it is said of Professors Peirce and Henry, (the only members of the Council who were in the city at the period referred to):

"They bitterly, and, as the Trustees believed, very unjustly assailed Dr. Peters, both in his private character, as a man of honor, and in his public standing, as a man of science."

In the account of my own address, given by the Accusers (pages 61, 62) no allusion to Peters will be found, although the authors profess to follow the course of my remarks very carefully.

Yet on page 65, Mr. Wilder is represented as saying:

"You all remember the intemperate outburst of Dr. Gould when alluding to Dr. Peters, asserting his incompetence, and dealing largely in personal vituper-

tion, all savoring more of the petulance of an irascible and pedantic schoolmaster, than the calm dignity which should distinguish the savan and scientist. So marked and noticeable was the eruption, that some of his more politic colleagues, by expostulatory waving of their hands and soothing entreaties, calmed him into something like a respectable equanimity."

It is unnecessary to speak of the remarks of my colleagues in the Council, farther than to say that they are untruthfully described. As for my own, I endeavored honestly, truthfully, courteously and manfully to tell the history of the manner in which the continual interference of Dr. Armsby had destroyed or marred my plans, defeated my hopes, and thwarted my endeavors. I disclaimed the imputation of any wrong motive to him (not even mentioning his name if I remember correctly;) but yet complained that my directions or advice had not been followed, but had been habitually neglected or disregarded for the sake of mere show. It was my endeavor to speak of Dr. Armsby kindly, though it was necessary to speak unmistakably. He sat close by me and could have contradicted any statement which he desired to call in question. But he said nothing, for he knew that I spoke the truth. Finally I alluded to the newspaper attacks and the private calumnies then so rife, and asked the opportunity to disprove any which might have come to the hearing of any member of the Board. Although I knew that the busy and cunning brain of this weak, yet mischievous, man had devised and started these very calumnies, I made no allusion to this fact. Nor did I, directly or indirectly, allude to Peters.

As for the long story of the Accusers on page 62 about the west wing, I may repeat that my illustration was a correct one, and that it is untrue that this wing was taken down either by my directions or to allow the working of the crane.

I did not close by giving any pledges, but by expressing my sense of the contumely and ingratitude with which I had been treated. I did not "beg the members of the Board to give me their votes," for I was not a candidate for anything. I had been serving the Observatory on my own proper account, and at my own charge, and expected to continue so to serve it under the new arrangement and compact.

Mr. Olcott did *not* attempt to vindicate Dr. Armsby; but defended himself from the charge of wastefulness, although it was obvious to every other person in the room that none of my complaints referred to him; and I then again expressly disclaimed any reference to him. His apparent sensitiveness surprised me at the time.

81. *The Unexaggerated and Truthful History.*

From page 64 of the "Statement":

"The Board met again on the 19th of January to decide upon their course. It is the earnest desire of the Trustees to place this whole history before the public in an unexaggerated and truthful manner."

Whatever comment the reader may be disposed to make, I will only make this one, viz: that when the Accusers continuing, say

"They feel, therefore, that they cannot do better than to introduce here the remarks at this meeting, of their late associate, the deeply lamented John W. Wilder,"

they make themselves responsible for all the contents of this so-called Speech of Mr. Wilder.

82. *Mr. Wilder's alleged Speech.*

The remarks given by the Accusers in smaller type on pages 64–68, in the form of a speech from Mr. Wilder, are prefaced by the following sentence (in which I will italicise a few words):

"It having been determined that the Trustees would accept the *proposition of the Scientific Council*, and place the Observatory *in charge of Dr. Gould*, Mr. Wilder addressed the Board in the following language."

They present a tangled mass of bad rhetoric, bad temper, bad faith, bad garbling and bad falsification; and I will not expend the labor and the space required for going over them in detail. The letter of introduction to Dr. Armsby which I gave to Dr. Peters, 1856, July 22, is quoted on page 65, but as I have no copy, I cannot tell whether it is correctly given. Every other extract from my letters is altered, excepting the single sentence at the foot of page 66.

One specimen of their falsifications will suffice. It is introduced to show that I indorsed Dr. Peters as an "experienced astronomer."

From the "Statement of the Trustees," page 66.	*What I wrote to Dr Armsby, 1856, June 21.*
"Doctor Peters is a man who has seen and experienced much, and I think you will like him. Born in Denmark, or rather Schlesswig, a Duchy adjoining Denmark, of which the King of Denmark is the Duke: educated in Prussia, he was for a long time employed in the Geodetical survey of the Neapolitan Kingdom; then in Sicily during the war of the Revolution; after which he resided some years in Constantinople before coming to America. So he has had plenty of experience."	He is a man who has seen and experienced much, and I think you will like him. Born in Denmark, or rather Schleswig, a Duchy adjoining Denmark, of which the King of D. is the Duke, educated in Prussia, he was a long time employed in the geodetical Survey of the Neapolitan Kingdom; then in Sicily while she was in revolution, after which he resided some years in Constantinople before coming to America some twenty months ago. So he has plenty of experiences to relate, and little odds and ends of wisdom picked up in various corners of the earth.

The paragraph immediately following this "improved extract" asserts that in a review written by me in 1849, I spoke of this same Dr. Peters "in the warmest terms of praise." Since the review alluded to was not published with my name, the Accusers had no right to cite it; but so far as I am concerned, it is quite immaterial, inasmuch as the assertion is totally untrue. In the passage mentioned I spoke of *a pamphlet of* Dr. Peters, but not of the *man* at all,—neither in terms of praise or otherwise. Upon this alleged speech, with its deliberate misstatements, its bitter invective, its irreverent language, I have no desire to dwell. Although the Accusers have adopted it, yet they have attributed its authorship to one who is now beyond the reach of human judgement; and however warrantable or even desirable a full exposure might be, I will refrain. He can do me no harm, and my action is defensive only.

There is much that is commendable in the old adage which calls for "nothing but good concerning the dead."

Since Mr. Wilder's death, more than one of the signers of the "Statement," while publicly denying the fact of mutilations and forgeries in their alleged extracts, have not scrupled privately to defend themselves by attributing these "accidents" to Mr. Wilder.

As for myself, I do not charge him with this crime. From the nature of the case, he could not have done the whole.—No, the responsible author occupies a far higher station than Mr. Wilder ever aspired to.

83. *Resolutions of January* 19.

It has been already mentioned that the resolutions as printed by the Accusers on pages 68 and 151, are not like the four copies signed by Dr. Armsby as secretary, and sent by him to the members of the Scientific Council. In them, about one-half, viz: the preamble reciting the alleged resolution of January 9, did not occur.

This very resolution differs slightly in the several versions of it, for while on page 68, the members of the Council are spoken of as gentlemen "whose names are so illustrious in science, and who are so disinterested in their efforts for its advancement,"—this word "disinterested" becomes "*distinguished*," on pages 57 and 151 of the "Statement." The reading "*disinterested*" is in the certified copies.

But there is a more astute alteration, in these resolutions, and one very characteristic of the disreputable practitioner. Not only is this preamble reciting the resolution of January 9, inserted; not only is the language changed; but as already stated on page 68, the article "*a*" is changed into the adjective "*such*," so as to refer to the words "The Scientific Council of this Board" in the preamble. The words "*of this Board*" in the one place, and this newly fabricated word "*such*" in the other are then put in capitals to attract attention together, and the skilful process is accomplished. The reader will find this neat performance both on pages 68 and 151. So in changing "A" into "SUCH" on pages 68 and 151, the artist forgot that the true resolution was cited in the preamble to the resolution given on page 123. By referring to that page of the "Statement" the reader will find the resolution as recorded by the Secretary and transmitted to the Council at the time.

Since these resolutions are very important ones, I must add a few words concerning their import.

At the time of our original election, we were invested with the *scientific control* of the Observatory, and this resolution professed "*to ratify and confirm*" that action.

Moreover, the closing resolution, which we have before quoted, ratified the proposition made by Mr. Olcott, and thereby placed the Observatory in charge of one of the number, myself, who was, "under the Scientific Council" (not the Trustees), "to be responsible for the scientific character of the Institution" placed under my "entire charge."

The resolution is as follows:

"That the Board of Trustees ratify the proposition of Mr. Olcott, on behalf of the Trustees, which has been accepted by Prof. A. D. Bache, of the United

States Coast Survey,—That the Observatory, under the supervision of the Scientific Council, shall be immediately placed in operation, and in charge of Dr. B. A. Gould, Jun., and his assistants, in the employ and in the pay of the United States Coast Survey."

The Observatory is here said to be under the supervision of the Council; while, in Mr. Olcott's letter, "Dr. Gould" is "to take the entire charge of the Observatory," "under the Scientific Council." The loose way in which the whole of the resolutions are drawn did not invite a criticism of them with a view to the minute understanding of their meaning.

In each of these respects, as in the other point sufficiently discussed on pages 68, 69, the Council saw that there was an opportunity to attempt some violation of the agreement, but as the original understanding, (the proposition of Mr. Olcott) had been very explicit and Prof. Bache had formally disclaimed that his acceptance had been in any official relation as Superintendent of the Coast Survey, we regarded all these as mere verbal mistakes and not as an intentional perversion of the relation of things, intended to involve any one of us in difficulty in return for our services. To have suspected a covert attack, or the preparation for an assault, in return for our services,—acknowledged at the same meeting,—would have been to attribute treachery and meanness to the Trustees as a Board, whose relations to us at that time did not warrant a suspicion of the sort.

84. *Authorship of Attacks through the Press.*

Upon pages 68 and 69, the Accusers say:

"Immediately on Dr. Gould's return to Cambridge, he addressed a letter to Mr. Olcott, in which he charged directly upon one of the Trustees, and that too in an offensive manner, the authorship of certain paragraphs that had appeared in the public prints reflecting upon the notorious inactivity which had prevailed at the Observatory. Knowing that there was not the slightest foundation for the charge, an answer was returned to Dr. Gould, assuring him that his suspicions were entirely groundless.

"Instead of retracting or apologizing, Dr. Gould reiterated the charge."

Before exhibiting the mutilation of my letter as given by the Accusers, I will give the actual words of my previous letter to Mr. Olcott, in regard to the constant abuse of me through the press, incited by Dr. Armsby,—immediately after his pretended reconciliation and the pathetic expressions of regret for his past course coupled with protestations of sincerity. It must also be remembered, that these offensive pieces were not "paragraphs reflecting upon the notorious inactivity which had prevailed at the Observatory," as the Accusers now allege; but consisted of bitter personal attacks upon myself and Prof. Bache,—invective against the Smithsonian Institution, the Coast Survey, &c.,—together with numerous tirades and exhibitions of indignation at the "persecution" of the "progressive" and "unpretending Peters,"—and at the assumption of "foreigners," as the members of the Council were termed, who were endeavoring to dictate to Albanians,—and Dr. Peters was constantly represented as "an Albanian," whom these foreigners sought to "crush."

It must furthermore be stated that after the meeting of Jan. 19, I hesitated about leaving the city, lest, as before, new calumnies should

be originated and circulated; or new attacks be published which would demand immediate refutation or defence; but on suggesting this suspicion to Mr. Olcott, whom I supposed sincere at least in this arrangement, he assured me that my fears were without foundation and that he was sure I might leave without apprehension of any renewal of the assaults. It was for this reason that, finding my apprehensions realized, I wrote him ten days later, Jan. 30, as follows:

"You have possibly seen some of the attacks continually made on the Observatory and the Coast Survey, in the Albany papers, though I presume you have not been likely to see such as are in that class of newspapers which contain the most offensive ones.

"On successive days this week the ——, ——, ——, and ——, have published such attacks, generally printed first in New York as "Albany Correspondence" and then copied. In themselves such things are petty in the extreme, but as symptoms they should be met. Forgive me for assuring you that an appeal from you to Dr. Armsby will stop them. My opinion of the origin of some of them at least is based on *knowledge;* and the Dr. ought to see that no end which he desires can be forwarded by such a course. You and I, my dear Sir, would not give a second thought to them, did they concern only ourselves; but as it is the Observatory, and not ourselves, for which we are both striving, we may be sensitive and thin-skinned there, when we should not even be annoyed personally. . . . .

"The inclosed is from the Statesman of Thursday evening.

"Whenever the estimates are approved, I can begin on the preliminaries of furnishing rooms and office, without a day's delay."

Mr. Olcott's reply was as follows,—dated 1858, Feb. 1:

"I have seen some of the articles in the newspapers to which you refer, but have no idea from whence they originated. I certainly never suspected the individual you mention. General Pruyn told me some days ago that he would see the correspondent of one of the New York papers, in which an article had appeared, and give him a correct understanding of the matter. I shall have no hesitation in saying to Dr. Armsby that we are bound to carry out in good faith, our friendly arrangements with our Scientific Council, and to strengthen their hands as far as within us lies, in furtherance of the aims and interests of the Observatory. And I cannot believe that any Trustee would do an indiscreet and unhandsome thing in the way of secret assaults through the newspapers. I shall not venture to bring such a charge against my friend Dr. A., nor even to insinuate your suspicions unless upon reflection you authorize me to do so. I think you should have some substantial proof to justify even such a suspicion."

To this, upon which subsequent events furnished so remarkable a commentary, I replied in the letter cited by the Accusers:—

From the "Statement of the Trustees," page 69.

What I wrote to Mr. Olcott, 1858, Feb. 3.

Might not the reprinting, in the Atlas or Journal, of some of the facts contained in the circular pamphlet of a year ago, or even in your preliminary remarks, be sufficient to stop such pieces as those of the Statesman of Monday or Express of yesterday? I am deeply sorry that you should think my suspicions unfair or ungenerous,—but you will remember through what a terrible ordeal I have just passed, and that it

Instead of retracting or apologizing, Dr. Gould reiterated the charges, and wrote as follows:

"The results of cautious inquiry as to the promptings of these publications would, I think, surprise you; and though my sources of information are, like those of others, fallible, I fear that you would find my opinion justified, that the correspondent of the New York *Courier and Enquirer* was instigated by the same person who incited the Editor of the *Statesman;* that this last named Editor is himself the author of the article in the New York *Express*, whence he copied it; that the offensive piece in the *Atlas and Argus* was published by request from the same quarter. But this is meddling with pitch."

has not been without its sad experiences and instructions. The intimation was not given in order to bring any charge or to find fault; nor have I any desire that suspicions should be intimated or accusations brought. It was because I could see no other means of attaining what we both desire.

The results of cautious inquiry as to the prompting of these publications would, I think, surprise you; and though my sources of information are like those of others, fallible, I fear that you would find my opinion justified that one mind has indirectly prompted all these attacks. That the correspondent of the N. Y. Courier was instigated by the same person who incited the Editor of the "Statesman;" that this last named Editor is himself the author of the article in the N. Y. Express, whence he *copies* it; that the offensive piece in the Atlas and Argus was published by request from the same quarter, &c., &c. But this is meddling with pitch, my dear Sir, and not work for us. Like other low things, it ought to be stopped, and then the less said or thought of it, the better.

85. *Removal to Albany.*

My removal to Albany in conformity with the Compact, to take charge of the Observatory under countless discomforts, obstacles, difficulties and privations, is very speedily summed up by the Accusers. They say:

"About the middle of February, Dr. Gould came to Albany, having previously applied to the Board for an appropriation to build a new dome."

86. *Application for a new Dome.*

It has been already mentioned that, not only on various occasions during the months of November and December, but actually after the compact of December had been made and acted on, new applications were made by Mr. Olcott for the appointment of Dr. Peters. In these interviews he was usually accompanied by Mr. R. H. Pruyn, an iron manufacturer of this place, and one of the Nine signers of the "Statement." When, on the 19th of January, I called on Mr. Olcott at his request after the adjournment of the Board, I found this Mr. Pruyn with him. Mr. Pruyn took me aside and made, even then, yet a new appeal in Mr. Olcott's name for this same, so often demanded and so often declined, appointment. This was the eighth or ninth application,—and was three weeks subsequent to the answer of the Council on this very point, given by the Accusers on their 54th page, and discussed by me in § 72.—My answer was courteous but decided, upon which Mr. Pruyn informed me as a matter of confidence,—that his workmen, in attempting, a few days previous, to put up the iron shutters for the dome, had found it so weak

that the opening had widened by several inches as soon as the tinning was removed which had covered the aperture since the building was first erected;—and that it was evident the dome was incapable of supporting the weight of the shutters. That Mr. Olcott knew this, but no one else, and it was on every account desirable it should be kept secret. That an *iron dome* could be easily constructed and with comparative cheapness; and if I would assent to the proposition for appointing Peters, the Trustees would be made to assent to the building of an iron dome, and everything be smoothly and pleasantly arranged!

I made no reply to this very transparent proposition, other than to express my regret for the untoward discovery, and for the inadequate construction of the building.—We then rejoined Mr. Olcott, who again urged Peters's appointment, "as a concession and act of generosity," and I agreed finally to take it into consideration until the next day.

The next day I told Mr. Olcott that I had again considered the question of Dr. Peters and much regretted my inability to do what I knew he desired, but he really must excuse me.

Mr. Olcott then brought up the dome matter in a manner which I thought intended as a threat, but of which I took no notice. The idea of being held responsible for its bad construction in 1852, although my first connection with the Observatory was in 1855, did not disturb me much.

I replied that I would ask Mr. Hodgins to institute a careful examination of the dome, and to report the results; and would then communicate my views on the subject to the Board of Trustees. (It was at this same interview that Mr. Olcott requested me to communicate with the Board regarding the distribution of the promised $2000 from the State.)

Immediately afterwards I requested Mr. Hodgins to make the examination, and upon the reception of his report I transmitted it to Mr. Olcott for the Trustees, accompanied by two letters, both of which have since been published ["*Correspondence*," pp. 8, 10]. One of these letters was addressed *to the Trustees*, under date of Jan. 27, and informed them of the exact state of things. It said:

"I entirely concur with Mr. Hodgins as to the importance of a dome more thoroughly and strongly built; and have indeed long been convinced that the extreme weight of the present dome would always offer a serious obstacle to the convenient use of whatever instrument it might contain. The defects of strength and stiffness now apparent are of a still graver character. There can, I think, be no doubt that a dome of equal size and convenience, with all needed strength, might be constructed, having scarcely more than one-half the present weight, and I will not conceal that in my judgement such a one will be needed before any large instrument can be used with the success which we are entitled to anticipate and demand.

"Meantime, there is no doubt that a brace at the eaves would remove all apprehension of actual danger.

"Recommendations as to the details of construction are of course uncalled for, until you shall have decided whether another dome ought to be provided at the present time. Under ordinary circumstances, I would advocate this without hesitation. The only opposing argument is the cost, which, as you will perceive from Mr. Hodgins's report, would probably, all incidentals included, be more than $1500 and less than $2000."

The second letter was a private and friendly one addressed to *Mr. Olcott*. It is the one so shamelessly mutilated on page 131 of the "Statement," and will be considered by itself in § 122.

The Accusers say, page 69,

"The original dome had cost $2000. A new one would have cost about $3000."

On page 71 they speak of

"The application of Dr. Gould for the appropriation of $2,000 for a new dome."

And on page 137, recounting my misdeeds, they say:—

"A new dome must be built, at a cost of $3000 or more, or else the shutters," &c., &c., "must be lost."

After blaming me for this so-called "application for a dome" before the heliometer was finished, the Accusers continue (p. 69):—

"The suspicion would have been at least justifiable, under the circumstances, that the alteration was only desired, in order to occupy the minds of the Trustees, and thus divert their attention from the delay in mounting the instruments then on hand."

Such duplicity and baseness need no comment. Had I consented to the appointment of Mr. Olcott's *protege*, Peters, or assented to Mr. Pruyn's suggestion of the new iron dome, how different would have been the demeanor of these two gentlemen!

87. *The Meeting of the Trustees, March 2.*

My letter of estimates for the current year had been sent to Mr. Olcott for the Trustees, Jan. 21; the letter about the dome, Jan. 28. My arrival in Albany to take charge was Feb. 9. Peters being then still in the Observatory and the dwelling house not ready for habitation, my actual removal had been, by Mr. Olcott's advice, delayed till Feb. 20.—And yet these letters to the Trustees had not been transmitted by Mr. Olcott. It was not until March 2 that a meeting of the Board was called by Mr. Olcott, who had, by General Van Rensselaer's resignation, then become the presiding officer. Of this meeting no notice or previous intimation was given me. At it an "Executive Committee" of Nine was appointed,—Messrs. Prentice, Wickes, Davidson and Tibbits, who were suspected of not favoring Mr. Olcott's policy, being excluded;—and Mr. Olcott was elected President of the Board.

88. *The State Appropriation for Longitude.*

This matter has been so fully explained in the first part of this Reply, that but little more need be said. Mr. Olcott had informed the Council that he could obtain the appropriation at any time by means of any observations for geographical position,—since the appropriation was avowedly and openly made for the sake of aiding the Dudley Observatory. He even wrote that a determination of the *latitude* would suffice. The work being done by the Coast Survey, without other cost to the Observatory than

the mere incidental outlays, an estimated balance of $1400 would remain. The mode of distribution of this sum was recommended by me in my letter of Jan. 21 [printed in the published Correspondence, pp. 5–7,] as follows:

"For furnishing dwelling rooms in the house,	$400
" an office, " "	150
For mounting Meridian-circle,	300
For mounting and bringing into use the Calculating Engine,	200
For mounting small Coast Survey Transit,	50
For stationery and incidentals,	100
For fuel and lights,	200
For books,	100
	$1500

"It will be remarked that these estimates exceed the available means by $100; but having reduced them to the lowest possible figures, so far as I can now judge, I have left it to the future to show whether any farther contraction may prove feasible; the understanding being, of course, that the total is not to transcend the appropriation."

The reader will remark that under the agreement, the Observatory was in my charge, *subject only to the Scientific Council*, and the balance of the State appropriation had been promised for carrying it on. It was at Mr. Olcott's suggestion that I wrote to the Trustees asking their approval of the manner in which I proposed to apply the balance of the State appropriation.

When the reply came, March 3, it consisted of a resolution appropriating $300 for "mounting the Meridian Circle," and $150 for mounting "*the large Transit Instrument belonging to the Coast Survey*," and the following paragraph in the official letter:

"The Trustees could not authorize the other expenditures, for furnishing the house, etc., proposed in your letter of January 21st, until the appropriation of $2000 from the State shall have been secured."

My estimates, which the Accusers call an "application for the appropriation of $1500 for furniture, &c.," and for which they endeavor on page 70 to make me odious, as having desired to divert an appropriation for longitude to the purchase of "furniture, stationery, fuel, lights, &c.," were evidently not considered so very unreasonable by the Trustees on the 2d of March, 1858.

89. *Mounting the Instruments.*

This favorite phrase of the Accusers is almost solely used by them in connection with the expressed or implied repetition of the charge of delay,—a charge which has already been disposed of. They seem to consider this "mounting" as a thing which might be done at the word of command, as readily as a cannon or a portable spy glass could be "mounted." This whole process of "mounting" the meridian circle has been described on pages 125–128. The stone piers were to be laboriously prepared; careful, time-consuming measurements and tests made,—the clothing and casing constructed and put on, and the several parts of the

instrument carefully adjusted to their places by skillful workmanship with the aid of constant observations. To an astronomer familiar with the instrument, the ideas and declarations of the Accusers on this subject are more than ludicrous;—but when their excessive ignorance is made the basis for such unsparing calumny, in the endeavor to destroy the reputation of an innocent man, it is difficult to refrain from using appropriate language to characterize the act.

On page 71 it is said that

"More than a year and a half had passed since the period fixed upon by Dr. Gould himself, for mounting both the Circle and the Transit."

On page 72 the Accusers speak of an "early indication of intended delay," and again of "a pretext for still further delay in mounting the instruments." On page 73 they wickedly assert that "the replies" to the "applications" "for information as to the time when the Trustees might expect the instruments to be mounted and brought into use," "had been evasive—sometimes insolent, and never satisfactory." On p. 77 it is said,

"Repeated applications had been made to him for information as to the probable period when the mounting of the instruments, according to the promises made nearly five months previously, would be undertaken."

Was there ever before the publication of this "Statement" such an exhibition of falsehood and calumnious misrepresentation? Each of these extracts contains one or more gross misstatements. I had made no promises previous to the compact of December, 1857, and then no such specific promises as are pretended; and from my first arrival in Albany, in February, until the instrument was inspected by the Scientific Council, already "mounted" in June, no delay had occurred, but the operations had gone regularly and uninterruptedly forward,—and so they went on, from that time until the whole of the details of adjustment, the whole of the constructions or necessary alterations of the subsidiary parts, and the "mounting" and adjustments of all the subsidiary apparatus, had been fully completed (at my private expense). No interruption or needless delay occurred.

On page 154, 155, the Accusers say of the meridian-circle:

"The instrument itself was never seen by him [Dr. Gould] either in the hands of the makers or after its arrival in this country, except as it lay in its box, until after his dismissal, when he was aroused to a spasmodic effort to have it mounted."

The character of this statement may be appreciated by the reader of pages 125–127 of this Reply. But that the appreciation may be complete, I will add that, before opening the boxes and unpacking and examining the parts of the instrument on March 6, I wrote a note to the Secretary of the Board, inviting him and his co-trustees to be present; and that I called in person on the previous day upon Messrs. Olcott, De Witt and John F. Rathbone, three of my accusers, for the same purpose. None of them honored me, or manifested interest in the Observatory, by their attendance.

90. *Pretended Volunteers.*

"Nor could they perceive the justice of the complaint that the pretended 'volunteers' at the Observatory, were compelled to 'fulfil their former duties' to secure the 'means of subsistence.' The Superintendent of the Coast Survey had agreed to furnish from his corps of employees *these very assistants.* They could not, therefore, be regarded in the light of 'volunteers.' Their position in the Coast Survey was not altered, nor their 'means of subsistence' diminished, or interfered with, by their removal to Albany." ("Statement," page 72.)

The injustice, ingratitude and indecency of this passage is self-evident. The "Superintendent of the Coast Survey" had not "agreed to furnish from his corps of employees these very assistants," nor any assistants in any other manner than expressly as "volunteers." They were generous young men who assumed the Observatory labors in addition to such other duties as they had to perform,—duties the amount of which could not be diminished, but were in fact greatly increased by the longitude determination. Their previously inadequate remuneration was in no manner increased by these additional duties,—and these additional duties were not under the Superintendent of the Coast Survey,—but under myself, as Director of the Dudley Observatory. It is true that "their position in the Coast Survey was not altered, nor their 'means of subsistence' diminished, or interfered with, by their removal to Albany," but all the observatory work was added to what they would otherwise have had to do. But this ungrateful disavowal of generous services rendered, is what may be expected from men who could find in the demeanor of Messrs. Winslow, Toomer and Tilton an opportunity for the accusation of "incivility," "insolence," "untruthfulness," and "studied insults;" and from Accusers who could speak of these honorable and laborious young astronomers as "irresponsible subordinates whom Dr. Gould for his own purposes might see fit to harbor" at "the Observatory premises."

91. *Appropriations.*

The Scientific Council in § 11 of the "*Defence*" have so thoroughly disposed of the several items recapitulated on pages 72 and 73 of the "Statement" that it seems useless again to repeat the details. The whole may also be found in full in the published "*Correspondence.*"—No fairminded person who has read and remembers the "Correspondence" or the "Defence" can fail to perceive the efforts of the Accusers to give a forced and incorrect coloring to each of these matters. Answers to queries are recorded as "asking for appropriations,"—and announcements that I had myself discharged debts due by the Observatory, contracted at Mr. Olcott's order, are cited as "applications for payment." The Accusers recur to these matters on pages 131 and 132 in a series of misstatements which will be exposed in § 123. The reader will observe that appropriations made though not asked for, or made and not drawn;—expenditures incurred by me and notified to the Board, although not refunded by them;—appropriations asked for and made, but not placed at my disposal by the Board after I had myself incurred liability for them and paid them;—all are recounted by the Accusers in such phrase

as to imply that the money was asked for, received, and disbursed by me.

92. *The Evasive and Insolent Replies.*

The Accusers continue (p. 73):

"Up to this time, repeated applications had been made to Dr. Gould, for information as to the time when the Trustees might expect the instruments to be mounted and brought into use. The replies had been evasive—sometimes insolent, and never satisfactory. It became painfully evident to the Trustees, that there was no intention on the part of Dr. Gould to put the Observatory in active operation, or even in such a state of forwardness as would furnish a guarantee to the public that the Institution was progressing."

The accusation of delay has been disposed of,—both in this Reply (pages 104, 231) and in the "*Defence*" § 19.—To the charge of "evasive, sometimes insolent" replies, I have nothing to say other than to give an unqualified and broad denial, and to quote from the closing paragraph of Mr. Olcott's Manifesto:

"In our private intercourse he [Dr. Gould] has been courteous and gentlemanly."

93. *The insults to visiters.*

This charge, so far as it relates to the two visits of Dr. Armsby with Messrs, Wilder and Pruyn—has been considered by the Scientific Council in the "*Defence*" § 13, and on pages 86, 87, of this Reply. So far as it relates to others, not Trustees, I declare it false and calumnious, and challenge a show of proof. The function of showman is not part of an astronomer's duties, yet it has been most readily performed,—and when the applications of visiters became so numerous that my own time and that of my assistants proved inadequate to the demand, I engaged the services of a special assistant for this purpose, so that not only our time has been gratuitously contributed to the scientific work of the Observatory; but I have actually purchased, and out of my own means paid for the time of one person, exclusively for the service of the crowds who have been sent up to it, as if the few astronomical implements were a public exhibition of curiosities. No visiter was ever treated with unkindness or want of hospitality;—none was ever refused admittance excepting on three occasions. On one of these occasions two schools, with a large number of children, came up and endeavored to enter unannounced. It would of course have been improper to admit such a crowd which would have exposed several valuable instruments to injury,—but the case was rendered even stronger by the fact that a large galvanic battery was being tested at the time. The other two occasions were at times when the aid of none of the assistants was available, and I was myself unwell or busily occupied. The visiters were invited to call the next day.

These things are not mentioned to show that I did not neglect any duty;—for however disobliging and ill-natured it might have seemed, I should yet have been entirely justifiable in refusing untimely admittance to visiters, or the conversion of the Observatory into a show-shop. But they exemplify the intensity of falsehood which pervades this book of the Accusers.

94. Dr. Armsby's visits with Mr. Wilder and Mr. Pruyn.

The circumstances of these visits have been detailed in Part I, where several pages are devoted to the subject. I have full reports from each of the assistants concerned, relative to each visit. I believe their accounts to be thoroughly true in letter and in spirit, and they contradict every essential declaration made by Messrs. Wilder and Pruyn on pages 75 and 76 of the "Statement." There is but one point upon which my knowledge is personal. This is the assertion that

"A few moments before, Dr. Gould was seen at the window of his room."

This I can personally contradict, since I was not there. An italicised sentence of Mr. Pruyn's, on page 76, declares that Mr. Winslow

"Left the Trustees standing upon the steps for from twenty-five to thirty minutes."

Mr. Winslow assures me that the interval could not have exceeded five minutes.

I am convinced the whole account is as thoroughly false as this sentence,—and I will not occupy time and space with any extended discussion, but will simply quote two not very consistent passages.

The Accusers say, on pages 74, 75, in introducing these accounts of their visits:

"Dr. Armsby and Gen. Pruyn were treated with similar discourtesy. In short, it soon became apparent, that those Trustees, who, in January, had opposed the restoration of Dr. Gould, preferring to retain Dr. Peters, were to be made to feel, as often as opportunity should be presented, the active displeasure of the man they had offended."

Mr. Pruyn says (p. 76):

"On leaving the Observatory, Mr. Pruyn, solely for the purpose of endeavoring to preserve the relations between Dr. Gould and the Trustees, which he had been greatly instrumental in perfecting in the preceding January, remarked," &c.

This Mr. Pruyn is the same "General Pruyn" who, on page 129 of the "Statement," makes a forced and awkward effort to figure in the matter of the Heliometer, and whose proposition in January, of an iron dome I had not entertained.

The reader will note the phrase: "*restoration* of Dr. Gould" in January. This would imply that I had been previously deposed from some position. Yet the Accusers in one place deny that the place of Director had at that time ever been offered me, and the Managers were in January very careful to represent to those who did not understand the whole object of their intrigue, that Peters, although appointed (as they allege), "an observer," was to be strictly subordinate to me.

In order to contradict the simple, consistent, and assuredly correct, testimony of the three assistant-astronomers, the rhetoric of the Accusers culminates in the announcement (p. 79), that to have declined to notice the alleged misdemeanor

"would have been to *discredit the statements*, or *censure the conduct* of SUCH GENTLEMEN as John N. Wilder, Gen. Pruyn, Dr. Armsby, and other citizens

of EQUAL RESPECTABILITY. *If* THEIR *testimony was reliable*, the necessity for such action was most urgent!" .

The typography is mine.

Let the public judge of the "respectability" of the persons named, after the expositions of this Reply. If any other person of "equal respectability" has ever made complaint, I for one, never heard of it.

95. *Resolution of May* 22 *and Reply of May* 31.

These resolutions and the letter of reply have also been very fully discussed by the Scientific Council in the "Defence," § 14. That the resolutions were preposterous and insulting, no gentleman could deny. As for my answer, it may speak for itself. It is to be found in the "Correspondence," and in the appendix to the 3d edition of the "Defence." It has been submitted to many gentlemen in high official position,—some of whom are noted as tenacious of all the "rights, privileges and immunities" belonging to their stations. One and all, they declare that there is no ground of offence whatsoever in the letter.

It must be remembered that no complaint was made to me, by Dr. Armsby, by either of his companions, or by the Executive Committee. Their first intimation of complaint was contained in the insulting resolutions of the Executive Committee, May 22,—the day after the visitation of Messrs. Armsby and Pruyn. In that portion of the reply of May 31, relating to my assistants,—a reply which was declared by Mr. Olcott and his majority to afford "sufficient justification for terminating his [my] relations with this institution, unless arrogance, insolence and conceit, are suited to the taste of gentlemen of this Board," and which furnished the pretext for the "Want of Harmony" resolution of the Trustees,—a reply which I regarded and still regard as being respectful, courteous, and as conciliatory and kindly as self-respect or manliness permitted,—I wrote as follows:

"To communicate such a message would be to offer insult in return for their devoted zeal; for I feel sure that they have treated every comer with that courtesy which was compatible with the performance of duty. Their course deserves, in my judgement, the gratitude as well as the approbation of the Executive Committee, and I can not but express my surprise at a resolve which it is impossible for me to construe otherwise than as a censure, and which, if so construed, is entirely improper and unjust. If the Executive Committee have any supposed basis for such an implication, I shall be much indebted to them for whatever information on the subject they may possess.

"The time of four of these assistants, although contributed by them to the Observatory for scientific purposes, has always been at the service of every visitor, whatever his station; and those desiring information and instruction have uniformly found from them a kindly welcome and a full explanation of all points upon which explanation has been asked and could be given."

To this letter of May 31, no answer was returned by the Executive Committee, or the Board, except the "Want of Harmony" resolution of June 4, (see also § 104); which, according to a resolution subsequently presented by its author, Judge Harris, involved my "immediate withdrawal."

The Accusers speaking still farther of the letter say:

"Occupying a position which he had but just obtained at the hands of the Trustees, and that, too, not without the most humiliating importunity, he now *puts on airs*, and assumes to teach the Executive Committee and the Trustees, what belongs to them, and in what manner they should discharge their duty."

The position *obtained from the Trustees*! BY HUMILIATING IMPORTUNITY!! These declarations may go side by side with those which allege (p. 96) that Messrs. Henry, Bache and Peirce had been

"satisfied and even grateful that the Trustees, by a reluctant vote, should so far yield to their earnest *beseechings*, as formally to appoint them their Scientific Council."!

The Accusers' modesty rivals their truthfulness!

96. *Harboring of irresponsible Subordinates.*

The ingratitude and malignity of this sneer on page 79 of the "Statement" will be appreciated by the reader. Instead of two assistants as promised by the compact, four had been willing to come, and were laboring gratuitously for the institution. They were in no sense irresponsible, and I reiterate here as elsewhere that from the first to the last the course of all has been manly and correct, and that their characters, intimately learned from domestic intercourse, have won my respect, esteem and affection, and do not fail to command the respect and esteem of all who know them.

97. *The Finances.*

The financial statements of the Accusers are such as to indicate, what may be expected, when they are forced by public opinion, by legislative action or by the courts of law, to make a statement of the funds under their charge, and of the disposition which they have made of them. The Accusers themselves show enough to make it apparent why they are unwilling to offer the detailed statement of their accounts, which has been so often called for. They have indeed, as they say, "greatly erred," but not in the direction which they assert. If, in good faith they had followed the advice freely given, instead of wantonly disregarding it at every step, while professing to follow it, and had not sought to cover up their own wasteful course, by charges against one who was not at all responsible for their contracts or their employment of contractors, the recent discovery of a planet would not have been necessarily accompanied by the mortifying announcement that no means existed at the Observatory for the proper determination of its position.

Dr. Armsby, acting for the supposed Executive Committee, composed though self-constituted up to January, 1858, of Mr. Olcott and himself, employed the agents, workmen, &c., made the bargains, gave the orders, and Mr. Olcott certified the bills. They were the persons responsible for the expenditures. Many of the expenses were incurred, not only against my judgement, but against my earnest remonstrances.

On page 234 of this Reply will be found an extract from a letter of Mr. Olcott written in March, 1857, soon after I agreed temporarily to

try the experiment of personally directing the constructions at the Observatory, and to whom I had applied for information regarding the finances. (For the use made, by the Accusers, of these applications, see the "Statement," page 36). It has been already stated that this attempt of mine to direct was soon abandoned upon the conviction that Dr. Armsby's meddlesome and ignorant interference could in no way be prevented.

From my answer, 1857, March 10, to Mr. Olcott's letter of March 5.

"The bills are indeed enormous. . . . . How it was possible for Mr. Hague to set all instructions, both written and oral, so utterly at defiance, surpasses my comprehension.

"The present overhauling of accounts is, like the "actual cautery," far from agreeable, but eminently salutary in all respects. From Mr. Smith I have as yet heard nothing, but shall expect some information very soon as to the state of affairs."

From a letter of Mr. Olcott, 1857, March 25.

"Mr. Smith has been constantly engaged in settling up old bills in order that he might start free and clear of old transactions. It has been difficult, as the past is blended with the future in several instances. For instance, the fence is partly made—and in other matters materials are on hand. But he is closing up. The weather has been such as to prevent any mason work, and I believe there has been no delay which could have been avoided. The men are now at work."

The only account of the Finances given by the Accusers is that on page 81; where it is brought in by force in connection with my letter of May 31. No account of moneys received is given, and that of moneys disbursed is not only extremely vague and general, but does not cover the ground;—no mention being made of the outlays between the 1st and 29th of August, 1856, (the period of the Inauguration, during which very considerable expenses must have been incurred,) nor yet of any outlays between September 1855 and August 1856, which were not

"expended in the erection of the buildings contemplated by Professor Mitchel."

I have very slight knowledge of the sums received or disbursed by the Managers other than that which is before the world in the publications of the Accusers themselves,—the only additional fact, in my knowledge, being two subscriptions of $500 communicated by me to Mr. Olcott and Dr. Armsby,—and $1000 from Mrs. Dudley, for which no credit has been given her in their published statements.

The publication of an account of the Observatory by the Secretary, Dr. Armsby, in Munsell's "Annals of Albany," Vol. VII., has already been mentioned. This has a list of the donors, apparently down to September or October, 1856.

A second source of information is the list published by the Trustees, in their garbled edition of the Observatory pamphlet, June 1858.

From these several sources the following estimates of moneys received are deducible:

	"Trustees' Statement."	According to Munsell's Annals.	2d ed. Inaug. pamphlet.	Probable truth, as far as known.
Mrs. Dudley,				
for Endowment fund,	$50,000	$50,000	$50,000	$50,000
in 1852,.....	13,000	12,000	26,500	13,000
for Heliometer,....	14,000	14,500		14,500
Mr. Olcott, in 1852,....	?	500	1,000	?
" in 1856,*...	10,000	10,000	10,000	8,850
Others, prior to inaug.†	12,000	10,150	.....	10,150
" since inaug.,...	.....	.....	34,650	35,650
				$132,150

This does not include the contribution of clocks, gas-apparatus, furnace for *heating the Observatory*(!), trees, &c.,—the promises for all of these excepting the furnace having been given in 1855.

The accrued interest under the financial care of so shrewd a banker as Mr. Olcott, who has had all these large sums in keeping for longer or shorter intervals, must have amounted to a handsome sum. Mr. Olcott informed members of the Council at the time that Mrs. Dudley's endowment fund, though nominally $50,000, was in bonds and stocks whose value was somewhat over $52,000, and which yielded an average income *of nearly 8 per cent. on this value.* From the data within my reach I believe that a fair estimate of the moneys received and interest accrued upon unexpended moneys taken at the lowest estimate up to August 29, 1858, (the date selected by the Accusers,) would give an amount certainly exceeding $140,000.

The expenditures seem to have been somewhat as follows:

Building in 1853,.....	$22,450	("Statement," p. 81.)
Meridian Circle and Calculating Engine, with freight, charges, &c., and freight of Transit Instrument from Bremen,	10,000	
Books, (say).....	1,400	
Comet Seeker, clocks, batteries, &c.,..	1,700	
Dwelling house,.....	10,000	(Manifesto.)
	$45,550	
Advance for Heliometer,.....	7,000	("Statement," p. 81.)
Additions to Observatory and gas house,	25,000	(Inaug. pamph., 2d ed., p. 99,)
Other amounts paid for instruments and other equipments, (say).....	750	
	$78,300	

If these estimates,—which cannot be far wrong without inconsistency with some assertion of my Accusers,—should be even approximately correct, the remaining available funds of the institution would certainly exceed $60,000. Yet the Accusers say that *during the two years following the Inauguration* "$60,676.83" had been expended! and that the outstanding and unpaid bills amounted to some $4000 more! And

* See § 30, page 214.

† The Accusers say (p. 5) that in March, 1852, the subscriptions had reached the total of $25,000; and on page 81, that only $22,450 of this was expended.

this sum of about $65,000 corresponds with the account given by the same persons on page 99 of the spurious Inauguration pamphlet, where we read

"The Trustees have appropriated, since the Inauguration, for the purchase of Books, Instruments and Equipments, about $30,000.
"For additions and alterations to the Observatory building, for Observer's house and Gas Works, about $35,000."

And yet I cannot see how the books, instruments and equipments can have cost much more than $13,000 besides the $7000 said to have been advanced for the Heliometer!

I think the Accusers' accounts would puzzle much abler financiers than I am.

98. *Wasteful Expenditures.*

This subject has been sufficiently considered in Part I, page 104, to render farther consideration of it here unnecessary. The Accusers, who, it is to be remembered, are the "responsible guardians," speak on their page 82, of

"this enormous expenditure, a very large proportion of which has, so far as any useful purpose is concerned, been really *wasted*,"

thus in fact acknowledging their own culpability; although the acknowledgement is made in order to render it a means of throwing odium upon me, and averting it from themselves. The waste had not been in any plans of mine, but in their own reckless execution of proper plans, as well as in improper plans and devices of their own.

99. *The Plans and Specifications of other Large Buildings.*

In his Manifesto, indorsed by the nine, Mr. Olcott said:

"Dr. Gould had some time before procured plans at our expense, but without our sanction, of five large additional buildings, of which the present Observatory was to be the nucleus. The cost of these buildings would probably range from $100,000 to $200,000 under Dr. Gould's supervision."

and again, speaking of the "gentleman from the west," that he was shown

"a picture of the five new buildings, plans and drawings for which Dr. Gould has had made."

In the "Statement," page 82, the Accusers also say:

"Dr. Gould, upon his own responsibility, and without the knowledge of the Trustees, but at their expense, had procured plans and specifications of other buildings and erections, which could only be executed, at a cost ranging from $100,000 to $200,000."

The accusation of having plans and drawings prepared is a very petty matter in itself; but, in the use made of it, and in the inferences attempted to be drawn from it, it is as wickedly malicious as any of the other allegations of the Accusers.

The charge is so well harped upon that the reader might well suppose it based upon some act of inordinate usurpation, extravagance or other equally censurable nature. It is best disposed of by a statement of the matter; although like so many others brought up by my Accusers in their endeavors to find grounds of offence, the affair is too trivial to be worthy of the ink with which the account of it is made public.

I have already alluded to the constant thwarting of my schemes by the officious and ignorant, though doubtless not always ill-meant, intermeddling of Dr. Armsby; whose plans and schemes varied from day to day, and with whom the conception of an idea scarcely preceded the order for its execution, however inconsistent it might be with the plans already laboriously devised by the study of weeks and months and fully approved by me. No restriction existed to his unlimited power of mischief; and it seemed therefore proper to appeal to his imagination to restrain him so far as possible from this continual interference. With this view I requested Mr. Hodgins to prepare a sketch of prospective additions to the Observatory in order that Dr. Armsby, when his fancy had once been taken by the sketch, might be more successfully withheld from the forming and beginning to execute schemes inconsistent with the prospective plan. All this was in December, 1856, before the plans for the present dwelling house were prepared.

Mr. Olcott, to whom I communicated the scheme, expressed his approval of it, and the sketch which I requested Mr. Hodgins to prepare represented precisely those additions which the Observatory would certainly require if carried out on the scale originally contemplated, and arranged in a connected and sightly manner.

No provision exists in the present edifice, for the convenient use even of an ordinary comet-seeker; and none for an office. And although the purchase of any large equatorial was not contemplated until the instruments for absolute measurements should be provided and brought into use,—the time must of course come when an equatorial would be not merely desirable, but imperatively necessary, should the heliometer be kept employed in its own peculiar work. Yet no place would be left for such an instrument.

I therefore requested Mr. Hodgins to prepare a drawing showing a dwelling house together with an office-building surmounted by a small cupola, and a tower for an equatorial, connected by low galleries with the present Observatory, and to arrange them according to scale and distance as furnished him. The arrangement and distances were governed by scientific considerations and by the shape of the ground. No structure according to these plans was ever recommended, or even suggested by me, after they were drawn; but the desired end of gratifying Dr. Armsby seemed at the time to be secured. He caused a photograph of the picture to be taken, and by allusions to this "prospective plan" I more than once succeeded in diverting his mind from new and wild projects, which would assuredly have cost the institution much money, and then be superseded by some, perhaps yet wilder novelty.

It is proper to add that, contrary to my intentions, the sketch was fin-

ished in water colors, owing to a misapprehension on the part of the draughtsman.

The probable expense of execution of all these plans was estimated at $9000 for the dwelling house, $3000 for the office, $7000 for the tower, and less than $1000 for the connecting galleries. I am convinced that they could have been constructed for a much less sum than the amount of injudicious expenditures upon the Observatory premises during the years 1856 and 1857.

So much for the "five new buildings," and for the "cost ranging from $100,000 to $200,000." The picture has hung in my office at the Observatory since I have been in Albany, subject to the inspection of every visiter.

One of the most shameless falsehoods in the whole book is that which represents me as proposing and advocating this plan, and the necessary cost of executing it, after the present dwelling house had been erected, or determined on, and in speaking of this plan as "other buildings and erections," which were to be "in addition to" the "enormous expenditures" already incurred.

100. *Advances from private resources.*

"There are other statements" say the Accusers, page 83:

"in this message of Dr. Gould—such as the allegation that he had been advancing from his own private resources the means of conducting certain preliminary operations, to which he alludes, but of which the Trustees have no knowledge—which a proper regard for accuracy would have induced him either to omit altogether, or very essentially to qualify."

This alludes to the following passage in my letter of May 31:

"The undersigned . . . . . has been conducting the preliminary operations to the best of his ability; advancing the requisite means from his private resources."

Whether the Trustees had or had not any knowledge of these operations is an unimportant question. It is very certain that they might have had if they desired, for they were very frequently, not merely invited, but earnestly urged to visit the Observatory and make themselves familiar with its progress. But their intimation, that

"a proper regard for accuracy would have induced him [me] either to omit altogether, or very essentially to qualify"

my statement,—that the current expenses of the Observatory had been defrayed from my private resources, is quite in keeping with the character of the "Statement" in general. They dared not meet and deny the fact stated, for they knew that it was not only true but susceptible of easy proof.

101. *Relations with Trustees.*

This subject has already been considered in Part First, pages 19, 20. Although the tenor of pages 83 and 84 of the "Statement" is in direct opposition to my averments, I confidently appeal to the published

"Correspondence" which contains all my communications from and to the Board, and all those of an official character from and to its officers. No means consistent with self-respect was omitted to cultivate amicable feelings and to create pleasant relations with the members of the Board of Trustees without exception. And though I am not surprised at anything which certain members of the Board may utter, I am shocked at seeing the names of Messrs. S. H. Ransom, John F. Rathbone, William H. De Witt, and Isaac W. Vosburgh, attached to a contrary declaration; since however they may think they palliate their course regarding the other accusations by the plea that they took Mr. Olcott's assertions upon trust,—yet the charge that I had adopted toward the Trustees or any of them a "vindictive" or "rule or ruin" policy, was one which if they knew it was in the book they must severally have known to be without foundation:

"Towards those of the Trustees who had, to the last, advocated the appointment of Dr. Peters, he was especially vindictive. He spoke of them, on various occasions, in terms of ridicule and reproach. The treatment which some of these gentlemen received when visiting the Observatory grounds, showed, too, how deeply his youthful subordinates had been imbued with the sentiments of their principal."

So say the Accusers, speaking of me; and nothing could be farther from the truth. The Secretary had notified me and the other members of the Scientific Council that the action of the Board Jan. 19, had been unanimous!—And as already pointed out, Mr. R. H. Pruyn, one of the three who endeavored to quarrel with my assistants when visiting the Observatory grounds, says of himself ("Statement," p. 76), that "he had been greatly instrumental in perfecting" "the relations between Dr. Gould and the Trustees" "in the preceding January." After I took possession in February, the fact was never thought of in my relations with any of these gentlemen:

102. *The Rapid Approach of a Crisis.*

"It now became apparent, that the affairs of the Observatory were rapidly approaching a crisis."

Thus say the Accusers,—speaking [p. 83] of the reception of my letter of May 31.

They had endeavored to annoy, persecute, torment, insult and dishearten me; they had either disregarded my communications or made them merely the occasions for new indignities;—the malignity of one, the low cunning of another, and the sleek plausibility of a third had all been thoroughly devoted to the work. Their endeavors, indignities and intrigues had been treated by me like the idle wind which I heeded not; and at last, all other means failing, they had succeeded in my absence in creating a pretext for insulting my assistants, and in using these very insults as an occasion for their still more insulting resolution of May 22. After the lapse of ten days, I had sent them the letter of May 31, already referred to,—and in which I can yet see nothing which I would willingly retract or change. But for want of a better pretext this must serve,—and Mr. Olcott exultingly discovered not merely

"that the affairs of the Observatory were rapidly approaching a crisis,"

but also that my letter afforded

"*sufficient justification for terminating his* (my) *relations with this institution.*"

Such was the "crisis," and such the "approach" of it.

103. *The Address of the Citizens' Committee.*

The public meeting of citizens, July 14, and the Address, prepared and published by a Committee appointed by the meeting for the purpose, have been already mentioned. The Accusers in their so called "Statement" have not found it convenient to refer in any way to this overwhelming expression of public feeling. And their only allusion to the Address prepared by the Committee as expressive of the views of the meeting, and signed by twelve leading citizens of Albany, is not in the course of regular narration, but in the very collateral way of citing it as an illustration,—

"of the surprising credulity with which these citizens, themselves ignorant of the true state of the case, have adopted and endorsed the perversions and misrepresentations of Dr. Gould, and thrust themselves into the controversy."

The Accusers continue:—

"As might be expected from its origin, it is a partizan paper, and abounds with denunciation and severe epithets against the Trustees, and is liberal in its panegyrics upon Dr. Gould and the Scientific Council."

Any one who may read this address,—a declaration and certificate which has comforted, cheered and inspirited many a weary hour, will need no explanation of the tone in which my Accusers allude to it. I invite the reader to look at the names of its signers. They may be found on page 93.

104. *Trustees' Meeting of June 4.*—"*Harmony.*"

Of this meeting and the Resolution passed I have already spoken at some length;—as also have the Scientific Council in the "*Defence.*" It is also necessary here to repeat that the meeting was called without notice to me;—that *ex parte* and grossly incorrect accounts of the visitations of Dr. Armsby, were given by his two chosen companions;—that according to the "Statement" a Report from the Executive Committee of Nine was presented, containing serious misstatements;—that Judge Harris was elected, appeared, and proceeded at once to the performance of his prescribed part by moving my immediate expulsion;—that such a vote was at that time found impracticable, and after long and very warm discussion, a resolution was passed, which, as transmitted to the Council June 5, and to me June 14, is in the form given, page 87 of the "Statement."

I am informed by a member of the Board that he is confident the resolution as passed was not in the form certified to by the Secretary, Dr. Armsby; that the meeting of the Board was not full,—two being absent;—that the assertions that "the report of the Executive Committee was adopted by a unanimous vote," and that "all were agreed in

condemning the conduct of Dr. Gould" are false;—as is also the assertion on page 89, that the Minority who refused to sanction the resolution of June 26,

"distinctly disavowed any intention to justify or palliate the conduct of Dr. Gould."

105. *Reply of the Scientific Council to Mr. Olcott's Letter.*

Mr. Olcott having transmitted the "Want of Harmony" resolution to the three other members of the Scientific Council,—with a letter in which he talked of his "painful regrets," these gentlemen replied, acknowledging it as their duty to investigate the case, asking for information as to the difficulties referred to, and promising to assemble in Albany at an early day.

This reply of the Council is the subject of various sneers and insinuations by the Accusers on page 89 of the "Statement,"—accusing them especially of an assumption of prerogative, of conceit and of unworthy cunning.

Yet how did the case really stand?

Of all the important scientific matters to the Observatory, the most important is the selection of a Director; and, under the December compact, I had become director, subject only to the Scientific Council, as Mr. Olcott's letter to Prof. Henry, 1858, Jan. 23, stated:

"We placed the Observatory, on the day after you left, in the entire and exclusive charge of Dr. Gould, subject only to the Scientific Council."

It was, of course, inconsistent with self-respect, and with their obligations to the donors, and their pledges to the public, to yield the functions which had existed for nearly three years. The Council had received no pay or emolument of any sort. They had gratuitously given much time and attention to the scientific concerns of the Observatory, for the sake of making it a first-class observatory, as the Trustees had promised it should be, under their direction. They had incurred considerable expenses in journeyings on its account, and in residing away from their homes; but without permitting any reimbursement of their expenses by the Trustees or Executive Committee. Their time, efforts, and intellectual labor, had been expended upon this Institution.

They could not be deprived of their control without a violation of pledges given to them, to the donors, and to the public, as well as of a compact solemnly ratified by both parties,—the Trustees on one side, the Scientific Council on the other. Of this compact Mr. Olcott had spoken in such strong terms as these, in his letter to Prof. Henry, just quoted:

"I am sorry that we can be supposed capable of disappointing the expectations which we authorized you to indulge, and which our honor is concerned in maintaining."

Language can hardly be stronger than this, from the author of the propositions which were made to the Council in behalf of the Board, and ratified by the resolutions of both bodies.

The Council had no control over the financial affairs of the Observatory; and if, as is now pretended by the Accusers, they also had none

over the scientific concerns, what a mockery was the whole arrangement! The beginning was a delusion and a snare; and they were richly repaid for their confidence in those who brought them into this position. They were too confiding; and they have reaped their reward!

What was the object of communicating with Professors Henry, Bache and Peirce in regard to want of Harmony, and to new arrangements, if they had no authority, or "color of right?" Why did not the Board proceed to adopt its new arrangements, and to execute them, independently of the Council? Why did they direct the President to "communicate these facts to the 'Scientific Council'?" It is plain that they were aware of the Council's functions, under the compact,—that there was still a lingering feeling that the pledges and promises made to them could not be broken at one blow.

106. *Trustees' meeting of June 26—Determination to "rid themselves of Dr. Gould."*

"The determination of" Mr. Olcott and his followers, in the Board, "to rid themselves of Dr. Gould, was unalterable." ("Statement," p. 89.)

"The Trustees had determined, as they had done once before, to get rid of Dr. Gould." (p. 103.)

"The only desire of the Trustees was to relieve the Observatory from his charge." (p. 170.)

These and other similar expressions by the same authors suffice to show the malignity which had been "unfolded" in the mind of the angry President by my courteous though decided refusal to comply with his demands, when unreasonable. The plea

"that the best interests, if not the salvation of the Institution, required that this should be done,"

might have had more weight if Mr. Olcott had not declared that the institution would not, before the beginning of 1860, be in possession of any available means,—and were it not that my own services and those of my assistants were not only purely gratuitous, but even the current expenses defrayed from my own resources. It will hardly be pretended that another astronomer would have been found willing "to work for nothing and find himself;" and unless the scientific interests of the Observatory were suffering by my presence, would "the salvation of the institution" require me to be expelled previous to the date at which some income from the endowment fund would be available? And as to these scientific interests, does Mr. Olcott profess to be a better judge than Professors Henry, Bache and Peirce combined?

No, the evil passions of this man were aroused,—passions whose impatience of check and malignity of purpose have impelled him for personal motives to a course of action utterly regardless of the interests of the institution confided to his protection, and which he was to cherish as a sacred trust.—This institution might have rendered his name a precious memorial and an honored word, when other associations were buried in oblivion,—but it will now stand connected with it, as fit only for that immortality of infamy which distinguishes the name of him who fired the Ephesian temple.

The proceedings of this meeting of June 26 have been detailed elsewhere, and a reference to what has been there said will render farther remarks here, unnecessary.

107. *Mrs. Dudley's Letter and the Reply of the Majority.*

On Monday, the 28th of June, the day previous to the arrival of the Council in Albany, and the day on which the abstract of Mr. Olcott's Manifesto of Saturday the 26th, was published, Mrs. Dudley, the founder of the Observatory, and the giver of probably more than one-half of its entire receipts, sent a letter to the Board of Trustees, as follows:

ALBANY, June 28, 1858.

To the Trustees of the Dudley Observatory:

GENTLEMEN—I am surprised and grieved to learn, through the medium of the public press, that serious difficulties have arisen between yourselves and the Director of the Dudley Observatory; and that you demand the withdrawal of the Director, and refuse to refer the difficulties in question to the Scientific Council, except upon the basis of the removal of one of their own body, to whom the management of the Observatory has been entrusted.

It is well known to you that my large donation was made under the express condition that the Observatory should become a National Institution, dedicated to the advancement of one of the noblest branches of science, and that the eminent gentlemen composing the Scientific Council, should be entrusted with its development and management. I relied upon the gentlemen who have been named as Trustees, in the original act of incorporation, passed several years before, to co-operate harmoniously with the Council, and have never sought to interfere with your action, so long as it appeared to be directed towards the great objects to which the Observatory is dedicated.

Having undiminished confidence in the intentions and ability of the Council to accomplish the ends proposed, I cannot but feel the most earnest desire that every member of it shall receive the hearty co-operation and support of the Trustees, without which all our efforts must fail. Learning that the action of your Board, which I refer to, is not unanimous, I have now respectfully to request that those members of it who cannot cordially continue to discharge the duties which devolve upon them in connection with the Scientific Council, as at present organized, and with the Director now in charge, shall resign, and leave their places to be filled by such donors to the Observatory as may be selected by the remaining Trustees.

The disinterested zeal for the cause of science, which has prompted you to undertake the labors and responsibilities which have devolved upon you, will, I trust, lead any of you without hesitation to withdraw from the control of the Observatory, rather than hazard its success by placing it beyond the supervision of those gentlemen whose names have been the guaranty to most of the other large contributors to the Observatory, as well as to myself.

I am, Gentlemen,
With much respect,
Your obedient servant,
BLANDINA DUDLEY.

Referring to this letter, the Accusers use the following language (p. 93):

"The man who dared to invade the seclusion of this aged lady, and obtain her signature to this paper, uncomprehended and incomprehensible, as it was, by her, is guilty of *moral forgery*. No measure of condemnation or contempt is adequate properly to characterize such an act. And yet this was done—done, too, by a prominent party to this controversy—done with the most unworthy motives—not with any hope of influencing the action of the Trustees,

but for the purpose of exciting prejudice against them where the facts are not and cannot well be known.

Fully aware of all these circumstances, and of the *moral fraud* which had been practised upon this excellent and venerable lady; and knowing, too, as they did full well, how totally unfamiliar she was with all the facts which enter into this controversy, the Trustees, nevertheless, thought it expedient to reply to the letter, as though she had been its author, in kind and courteous terms."

There can be but little doubt that, in the above allusion, the Accusers intend to intimate:

1st. In regard to myself,—that I either prepared this letter of Mrs. Dudley's, or procured her signature to it, or both; as also that I "invaded her seclusion," and gave my own coloring to facts with which she was unfamiliar, and which she accepted from me as true, although they were not true.

2d. In regard to Mrs. Dudley, that "her signature" was obtained to a paper drawn up, not by her wishes or procurement, and which was "uncomprehended and incomprehensible by her." On p. 92, the Accusers say, in so many words:

"No one, not even Dr. Gould himself, will say that it was written or even dictated by Mrs. Dudley."

What an array of infamous and false accusations!—What malignant insinuations!—What measureless ingratitude!—And coming from the man, too, who boasts on page 23 of the "Statement," that less than two years previous to this very time, he "obtained from Mrs. Dudley the munificent donation of $50,000!" I know less of Mrs. Dudley than others, but I have the very best authority for saying that her capacity for business, her vigor of mind, and her powers of comprehension were quite as active and strong at the date of this letter as they were when her donation was obtained. And if the charge of "moral forgery" is applicable anywhere, it belongs to Mr. Olcott, who has obtained money from her, and not to others who have not.

As for the accusations in regard to myself, I declare that I never saw the letter until it was shown to me already signed by Mrs. Dudley; that,—knowing how much she has been distressed by the threatened failure of her cherished plans, by the unspeakable ingratitude of Mr. Olcott, whose success in life had been due to the encouragement and protection of Mr. Dudley, and who had been appealed to by his widow to aid her in rearing some lasting monument in honor of her husband and his benefactor,—I have, since my residence in Albany, studiously refrained from introducing a subject which could give her pain; that my strong conviction is, that I had not seen or communicated with Mrs. Dudley for several weeks previous to the time when this letter was handed me, already signed; that I am now aware this step had been in contemplation by her for some time, and was taken by her, after full consultation with a gentleman as much honored for his high character as for his public station and services; and finally that, to the best of my remembrance, I never conversed with Mrs. Dudley more than twice upon details of observatory matters or difficulties, and never sought to influence her views upon these points. A sense of gratitude for what she had so

recently endeavored to accomplish for my chosen science has led me to avoid a subject which to her is the source of such bitter grief.

Mrs. Dudley is fully competent to speak for herself,—but apart from her appeals for the protection of the institution whose existence was due to her bounty and upon which the hopes of her declining years had centered, she desires to avoid entering into a controversy which she naturally deems unsuited to her sex and position.—The indecent and false insinuations made by the Accusers, relating to herself personally, she treats with the contempt which they deserve.

The answer of the Accusers, as given on pages 93 and 94 of the "Statement," is without date. No answer having been received from the Board or its officers, Mrs. Dudley's letter was inserted by her friends, in one of the daily papers of the 1st of July. And in the evening, the newspaper under Mr. Olcott's control published this pretended answer, *which had not been sent to Mrs. Dudley.* Mrs. Dudley immediately addressed a rejoinder to the majority through the same channel—the public press. To this second letter, of which I had no suspicion before I saw it in the newspaper,—the Accusers find it discreet to make no reference. It was as follows:

ALBANY, July 2, 1858.

To the Trustees of the Dudley Observatory:

GENTLEMEN—So far from entertaining the desire or design of entering into a conflict which I deem discreditable alike to man or woman, it is with unfeigned reluctance that I take the liberty of addressing you, even for the purpose of peaceful counsel.

If the professions of a desire to please me, contained in your answer to my letter of the 28th ult., are to be practically realized, the welfare of the Dudley Observatory must be deemed by you paramount to all selfish considerations, and not sacrificed at the shrine of petty personal animosity.

The name of my husband—a name to whose honor it has been my pleasing duty to consecrate my life—having been permanently associated with this Institution, through my instrumentality, I cannot acquiesce in any policy calculated to defeat the object I had principally in view, in largely contributing to the establishment of an institution intended to perpetuate the memory of a man as sincerely cherished by me since dead as he was honored while living.

As a practical measure, deemed by me well calculated to harmonize existing antagonism in the executive administration of the Dudley Observatory, permit me to commend to your favorable consideration and adoption the second in order of the resolutions adopted, at the meeting of June 30, by the Scientific Council, which is in the words following, viz.:

"To refer the difficulties between Dr. Gould and the Trustees to five discreet and wise citizens of Albany,—two to be named by the Trustees, two by the Scientific Council, and these four to choose a fifth. The award of these arbitrators to involve the complete decision as to the future arrangements of the Institution; and the Trustees and Scientific Council to pledge themselves to abide by the determination."

Appreciating at their intrinsic value the substance and style of the published copy of your answer to my letter of the 28th ult.,

I remain, the friend of the Observatory,

BLANDINA DUDLEY.

A copy of the answer of the Majority to Mrs. Dudley's first letter, was subsequently transmitted by them to Mrs. Dudley. Four of the signing Trustees were not even donors to the Institution!

108. *Assembling of the Scientific Council in June.*

In conformity with promise the three other members of the Council arrived in Albany June 29th. Notwithstanding Mr. Olcott's implied promise, no charges or specifications of any of the "constantly recurring difficulties" and no illustrations of the "want of Harmony" had been sent them. Not until one of them had arrived in the city, and the other two were already within the limits of the State, did they hear of the meeting, at which Mr. Olcott had presented his Manifesto, and the Board had indorsed it, and voted that I should not be recognized as a member of the Scientific Council. It was then they were met with that extraordinary medley of accusations, slanders and vituperation.

"It was evident," say the Accusers, (page 94), "from the beginning, that they had hastened to Albany for the purpose of sustaining their associate. He, not the Trustees, had appealed to them, and they had resolved not to desert him in his hour of need."

In this short sentence three distinct falsehoods are expressed.

The Council may speak for themselves in reply. I cite from the "Defence" a part of what they say on the subject:

"Being informed by the Trustees that difficulties existed between them and Dr. Gould, we hastened to this city in accordance with a previous arrangement, although at a time when it was exceedingly inconvenient for us to leave home, and pressing duties relative to our respective offices demanded our attention. We came with the determination rigorously to examine into the state of affairs, to ascertain how much of error might be due to each party, and to suggest rules for the government of both in their subsequent intercourse. We came not as partizans to uphold Dr. Gould in what we might consider the wrong, but as men having a solemn duty to discharge towards the community, anxious to prevent the dissipation of a noble bequest, anxious to avert the disgrace to the city of Albany, to ourselves, to our friends in the Board, which would result from an open and uncompromising rupture between our associate and the Board of Trustees."

The Council came to *inquire into the facts* of an alleged want of harmony, and with hopes of conciliation. For the sake of all parties—for the sake of avoiding a conflict between Science and Power—for the sake of other institutions, where money must be raised and managed by one set of persons, and the operations be guided by the professional knowledge of another set,—they desired to avoid the scandal of a public conflict. They have no taste for public controversies, nor for the bad notoriety which they give. They had accepted what they considered a trust for Science; it was sacred in their eyes; and connected with views reaching far above personal questions or considerations. The Board, while professing to treat them with great respect, assumed that they were to occupy an antagonistic position, and proceeded to treat them accordingly.

109. *Relations of the Council again.*

On this subject I will refer the reader to § 7, as also to Article I of the legal points, as given on page 156. And it will not be difficult for any one who has read the account of the original election, of the compact, and of the meeting in January, to appreciate the following para-

graph given on page 96 by the Accusers, in reference to the position of the Council:

"When they had last been in Albany, in their anxiety to retain even a slight footing in the Observatory, they were satisfied, and even grateful, that the Trustees, by a reluctant vote, should so far yield to their earnest *beseechings*, as formally to appoint them their Scientific Council, at the same time declaring, as the measure of their authority, that the Board would 'at all times be happy to receive from them any *suggestions* which they might deem calculated to advance the object and views of the institution.'" (p. 96.)

110. *The Compact.*

I continue the quotation from the "Statement of the Trustees" pp. 96, 97.

"Now, they proceed at once to *resolve*, 'That it is not consistent with the obligations by which the Trustees have bound themselves to the Scientific Council, to the donors and to the public, for the Trustees to *appoint* or *remove*, the Director of the Observatory, *without the concurrence of the Scientific Council*.'

"It may be useful to pause here for a moment, and consider the full scope and import of the resolution. It speaks of obligations—obligations of the Trustees—obligations self-imposed—by which the Trustees have *bound* themselves to the Scientific Council. It speaks of a solemn compact by which the Trustees had surrendered to these gentlemen a very essential part of the power delegated to them by the Legislature. The inquirer after truth will be amazed to know that the only foundation upon which these arrogant pretensions are based, is contained in the resolution of the 19th of January, which has already been noticed."

This hardly needs reply. The foundation of the claims of the Council is the Compact, based on the letter of Mr. Olcott, ratified and confirmed by the Resolution of Jan. 19, and the force of which was in no manner impaired by the clauses so cunningly inserted in that and other Resolutions. Mr. Olcott's own subsequent letter to Prof. Henry, January 28, affords abundant proof of this.

By this compact I was in full and exclusive charge, subject only to the Scientific Council; and the solemn and earnest declarations of the Council, which the Accusers pitifully attempt to ridicule by calling them "high sounding phrases," well express the sense of deep responsibility felt by every member of that body.

111. *Transactions of July—Refusal of hearing to the Council—"Expulsion" of the Scientific Council.*

Upon page 103 of their "Statement" the Accusers say that

"They believed, as every reader of this history will believe, that the gentlemen composing the Scientific Council, were brought to Albany, as they had been in January, to overrule the action and thwart the purposes of the Trustees. In all their proceedings, from first to last, they exhibit themselves as they had done before, not as the disinterested advisers of the Trustees, but as the partizans and champions of Dr. Gould."

This paragraph is sufficiently characteristic. The Managers intended to dismiss me in January, and this was one of the purposes in which they were thwarted! Yet not a month previous, Mr. Olcott had written to Prof. Bache a letter of which the following sentence is an extract:

"If driven from our association with you, we shall be upon the ocean without a star to guide or compass to direct our course, and we have no idea where in such an event we shall land. We cannot but regard such an event as a blow to our most cherished individual regards, and not less so, to the science of our country. If permitted to labor with our present Scientific Council, we shall not cease in our efforts until the Dudley Observatory is elevated to a position to do credit to our country, and to the scientific men who have identified their names with the Institution."

This sentence contrasts strongly with the statement that the Scientific Council had been brought to Albany in January as a hostile party to the Trustees. It was not till July that the disclosure was made; the Trustees acknowledge that they had determined in January, as in July, "to get rid of Dr. Gould;" yet on the 19th of December, Mr. Olcott had used the language above quoted, and January 9 the Trustees voted unanimously according to the "Statement," that they would

"ever receive, with the greatest deference and respect, the suggestions of gentlemen whose names are so illustrious in science, and who are so disinterested in their efforts for its advancement!"

The Trustees had resolved to get rid of me in January, and yet indorsed me in that very month. And it is after such an indorsement in the beginning of 1858, that a catalogue of crimes, prior to 1858, is prepared against me in a pamphlet of 173 pages. Is there no moral statute of limitations? Mr. Olcott wrote in October, 1857,

"All we have done and are doing is for American science, and we are disposed to be governed altogether by our Scientific Council. We have unbounded confidence in them in everything, and we wish them to consider us as an humble instrument in their hands in carrying forward this great enterprise. We have not a personal wish, object or interest in this matter. We are willing to sink or swim, with a Henry, a Peirce, a Bache, and a Gould, as the only chance of immortalizing ourselves in this world."

And does not this one extract contain a virtual sanction of all that I had done previously, and in itself afford a complete answer to the whole array of charges which are now brought forward against me and the other members of the Council?

The Scientific Council knew at the time of their visit to Albany in January the whole breadth and depth of the intrigues by which I was to have been insulted into resignation. It was their business to expose these intrigues; to investigate my personal and scientific character; to set right those members of the Board who were not in the conspiracy against me; to do fearlessly the duties which they had taken upon themselves when they became a Scientific Council. How well they succeeded the Accusers themselves acknowledge. The Council were heard and they prevailed; and open enmity took refuge again in secret calumny. Mr. Olcott well knew in June that if the Scientific Council should again be heard before the Board after an investigation of his accusations, it would be to defend me a second time and doubtless with success. When Professor Henry's letter of June 30, directed officially to the Trustees, was placed in the President's hands,—a letter informing the Trustees that the Scientific Council were in session and ready to receive any communications,—Mr. Olcott took it upon himself to

answer the letter. He ignored his fellow Trustees and assumed to act for them. He called no meeting to consider Prof. Henry's letter. *He* was the Board of Trustees. His letter in reply to Prof. Henry, Chairman of the Scientific Council, reads as follows:

ALBANY, June 30, 1858.

Prof. JOSEPH HENRY, *Chairman:*

Dear Sir—I have received your communication of this day. Our Trustees have had no meeting since Saturday last, and I know of no further communication which they have to make. If the Scientific Council have any recommendations to make concerning a successor to Dr. Gould, they will be received by our Trustees with the most respectful consideration.

I have the honor to be,

Your obedient servant,

THOMAS W. OLCOTT,

Pres't Board Trustees, Dudley Observatory.

Had the President plenary powers? Upon the Saturday referred to, Mr. Olcott made his charges against me, and Judge Harris, who had been a member of the Board half an hour, moved my dismissal. Does this look like a willingness to hear my defence? Will it be denied that Judge Harris attempted to obtain my dismissal upon the strength of an *ex-parte* statement by Mr. Olcott, without waiting to hear one word in my behalf? Yet the Accusers have the effrontery to say (p. 104):

"Let it be remembered that the only hearing which had been demanded, or was desired, was to be had before the self-constituted tribunal which had been convened at his instance; and which, as they believed, and that too, not without sufficient reason, as they think they have already shown, had no other purpose in view but the protection of Dr. Gould and the defeat of the Trustees. Had Dr. Gould desired to meet the Trustees for the purpose of explaining or disproving any of the statements or charges by which he felt himself injured or aggrieved, such a hearing would have been promptly and cheerfully conceded to him. He had been allowed such a hearing in January, of which he, and his associates, who had now been transformed into a tribunal of last appeal, had, to the fullest extent, availed themselves. They had, for the time, been successful. Now, they had no relish for a second experiment of the same kind."

If the hearing which the Scientific Council asked from the Board of Trustees, and which they were denied by Mr. Olcott, had been accorded, they would of course have defended me from Mr. Olcott's charges. I had a right to their protection. They were denied a hearing because they would have successfully defended me. The Scientific Council knew my whole course, approved of that course, and were therefore ready to defend it. But they had defended me successfully once, and the Accusers coolly say that they had now no relish for a second experiment of the kind! When the Accusers say that if "Dr. Gould had desired to meet them for the purpose of explaining or disproving any of the statements or charges by which he felt himself injured or aggrieved, such a hearing would have been promptly and cheerfully conceded to him,"—they forget that they had already "*dismissed*" him. Do the courts first decide a case upon the argument for the plaintiff, and afterwards hear what is to be said for the defendant? And now contrast this one sentence—this deliberate profession of their willingness to have heard Dr. Gould in his own defence, with those other paragraphs in which these same Trustees

actually admit that they had then "*determined*, as they had done once before, *to get rid of Dr. Gould*!" Were men ever more clearly, more overwhelmingly condemned out of their own mouths?

The series of arbitrary, unlawful and wicked acts in July, was closed by a pretended "expulsion" of the Council.

This was a fitting consummation of their foregone conclusion "to get rid of Dr. Gould." To do this, they must "get rid" of their pledges, "get rid" of their compact, and "get rid" of the Scientific Council. Compact, Gould and Council, stood together and must be "got rid" of together.

112. *Physical Force and the Sentinel.*

The charges of the Accusers upon this head are as follows:

"Finally, having exhausted both their denunciations and advice, they proceed to exercise *squatter sovereignty* by taking the Observatory and its affairs into their own hands—and to employ such physical force as they deemed sufficient to keep out the Trustees and defend themselves in their unlawful possession. The late Chief of Police, with an adequate number of assistants, have found steady and appropriate employment, probably at the expense of the Coast Survey, in standing sentinel and guarding the premises against any possible attack from the rebellious and refractory Trustees. The Trustees themselves can scarcely help admiring the cool hardihood with which all this has been done." (p. 106.)

"These men, relying upon their great name as a protection, have moved forward, regardless of law or right, to the execution of their purpose, with a resoluteness which would better become the *desperado* or the assassin, than men occupying their position in the scientific world. A sentinel now walks upon his post, at the gate of the Observatory, to repel any intrusion from its legal proprietors." (p. 170.)

Now what are the facts?

They are, that the grounds of the Observatory having been declared open to the public, by an order of the Executive Committee of the Trustees, May 22, it became necessary for me to employ a person to attend upon the visiters who daily resorted to the Observatory supposing it to be a show.

That this person is the very estimable and intelligent citizen, Mr. John Morgan, once Chief of Police, and well known for his agreeable address and knowledge of persons.

That he has never had any assistant or assistants, except when the press of visiters required some of the astronomers to aid him.

That he has been paid from my "private pocket," and not by the Coast Survey, as the Trustees insinuate with characteristic dignity, decency and respect for truth.

That his duties have been to receive, and not to repel, visiters; and that he has courteously and thoroughly performed these duties.

The absurd statement of the Accusers is intended to prove that physical force has been employed in retaining possession of the Observatory,—a charge which would be positively ludicrous if it were not wickedly false. There are thus three falsehoods, and one suggestion of a falsehood, in one paragraph. It is also studiously linked in the "Statement" with the Scientific Council's assertion of their rights. When it is remembered,

too, that Mr. Morgan was actually in the discharge of his duties for a month before the alleged occasion of his employment, the anachronism renders the charge absurd. Such are the statements of these men, blinded by their vindictive passions.

This, although one of the least of the falsehoods which abound in the long tissue which the Majority of the Trustees term their "Statement," is one of the most easily exposed.

I write these lines after having been hunted like a wild beast from the Observatory, and the attached dwelling,—equipped and furnished mainly through my labor and at my cost,—by a band of lawless invaders, hired for the purpose by Mr. Olcott, and aided and abetted by Judge Harris,—who had sat during the day upon what was, or should have been, the bench of justice. I have written but few words of this reply since I was informed by two ear-witnesses that Mr. Olcott had threatened that my friends "should walk over the dead bodies" of his hirelings before they should obtain admittance, and that "there would be plenty of blood shed, and bullets whistling around." It is not an hour since I have received the voluntary testimony, sent me by a repentant member of the band, who certifies under oath that he was engaged in his foul work, in the presence and with the expressed approval, of the Judge who penned the words quoted above from the "Statement."

113. *The Manifesto and the Investigation by the Council.*

Nothing strikes the Accusers with such astonishment,—nothing so provokes their indignation,—upon nothing do they dwell with such bitterness, as the boldness of the Scientific Council, in daring to defend the man whom Mr. Olcott had determined to destroy. The Council was not to utter a word of praise; the Trustees would only allow it to condemn. What except conscience told Mr. Olcott that the Council would acquit me and condemn him? When he refused to call a meeting of the Board of Trustees to hear the Council, it was because he felt that investigation would prove him guilty! The Accusers say, p. 105, referring to the "Defence," published after such refusal:

> "The entire vocabulary of compliment and eulogium in which these Scientific gentlemen are said to be unrivaled proficients, has been exhausted in extolling the merits of their colleague. This single fact is quite sufficient to show what the Trustees had to expect at the hands of such a tribunal. All that Dr. Gould had done, and more that he had not done, was deemed worthy of the most emphatic commendation, and the conduct of the Trustees throughout was denounced with equal emphasis."

The sneer in the first sentence is characteristic enough of the tone and temper of the Authors. And the whole paragraph shows what Mr. Olcott expected, and why the Scientific Council could not obtain a hearing.

In the very next sentence of the "Statement," the Accusers again express the same dread of the result of an interview with the Council. They then go on to speak of the resolutions passed by the Council after Mr. Olcott had taken it upon himself to refuse the Council a hearing. These resolutions are published in the "Statement," and speak for themselves. The ensuing allegation of the Majority, that the Council, after

retaining the Observatory in their own hands, had employed physical force to keep out "the Trustees," is absolutely false. The Scientific Council undertook their part of the agreement made with them by the Board, and by which the Observatory was placed in their hands: the Trustees could not annul it without the consent of the Council, and it is binding to this day. The community know, too, who have employed the "physical force."

The charges of Mr. Olcott were preferred and presented in writing; and the Board had its choice between summoning the accused before them, or hearing his written answer to the written allegations. Common justice provides for a hearing in the case of the meanest criminal. Here the accuser was the President of the Court; the members are his colleagues. The charges were made by him, and tried by them. The accused was not confronted with the accuser; nor had he an opportunity even to make a written defence. And yet one of these charges is incompetency as an astronomer, which strikes at the root of his professional reputation and professional support; and the other is peculation, which, if proved, would farthermore drive him from association with honest men.

These are the charges which, on the 26th of June, took the place of the accusation of "Want of Harmony" which had been made on the 4th of the same month. Courts of justice refer to experts in cases where scientific questions are to be examined; and here is one of the highest order,—the competency of an astronomer. What member of the Board of Trustees was competent to pass upon this, without the advice of experts? Not one. What a melancholy spectacle of an abuse of power is thus presented! It would have been pronounced a high-handed measure, if, for no cause assigned, or for "Want of Harmony," or the desire of a "new arrangement," I had been deprived of any honorable position; but when I am arraigned, without notice, upon the most serious charges, (let alone their falsity,) condemned unheard, and voted out of my place in the Scientific Council upon this charge, what strength of language can convey a sense of this outrage upon all the reason, the feelings, the dearest rights, of man?

114. *The charges of Incompetency, Peculation, Continued Delay, and Studied Attempts to Amuse with Trifles.*

These accusations, brought originally in the Manifesto, and indignantly refuted by the Council in the "Defence," form the staple of pages 108 to 117 of the "Statement." They have, I think, received sufficient notice and renewed disproof in the First Part of this Reply. And were my Accusers any other men than the ones I now know them to be, it would seem strange that they could dare repeat accusations so overwhelmingly rebutted by the Council, after the most searching investigation.

115. *The Longitude again.*

The matter of the longitude determination, has been made the subject both of § 88 of this Detailed Refutation, and of a special chapter in Part

First. Nothing more seems needed, than has been already given.—Still I will add a few facts.

It is a fact, which may be verified by the accounts at the Coast Survey office or the Treasury Department, that the telegraph expedition in which Mr. Bond was himself engaged for the Coast Survey, between Cambridge and Bangor, and which was under the direction of Prof. S. C. Walker, cost *exclusive of* salaries the sum of $904.25, or within $23.69 as much as the work under my direction, which Mr. Bond says should not have cost "*beyond two hundred dollars.*" And the expedition under Mr. Bond's direction, for the Coast Survey, between Cambridge and Halifax, *which failed to give any trustworthy result*, cost more than the sum which he names as sufficient for this work. Unless the data are precise, an estimate is worth nothing, and Mr. Bond had not the data to form an estimate for this work. If the transit-instrument of the Observatory had been mounted for this longitude campaign, the expenses thereby entailed would have amounted, at the very least, to three quarters of the whole sum estimated as needed for the operations, and much more than the building to cover all the telegraph instruments, which was used as the longitude station. The cheapest and most effective methods were used.

It is a curious fact that not very long after the publication of the "Statement" a communication from Hamilton College was received by the Regents of the University, offering to determine the longitude of that place, (from what point is not stated,) and asking one year's time and $1000 as remuneration. This was accompanied by a document advocating the measure, but signed by the same individual who on page 166 of the "Statement" alleges that the estimated cost of such a determination is from $100 to $150!

Dr. Peters asserts:

"Mr. Bond, in September, 1857, kindly offered for the longitude the co-operation of the Cambridge Observatory. This offer, orally made to me, [Peters] I communicated immediately to Dr. Gould, but it was by him instantly and despisingly refused."

This, so far as it relates to myself, is without truth or foundation; for I never heard of such an offer until I read it in the "Statement;"—and therefore could not have refused it, either "despisingly," or otherwise.

Upon page 116 the Accusers say that

"since the proposition to undertake this work was made in January, Dr. Gould has stated to several members of the Board of Trustees, that it would occupy TWENTY-FIVE months, and that the work would be of such a character as to render it impossible to do any other Observatory work during that period."

The only basis for this very untruthful assertion, is the following: In conversation with Mr. Olcott, at his bank, in April or May last, he inquired what length of time would be needed to make, reduce, and compute the observations for longitude. I told him that the time requisite, like the expense, increased in a high ratio in proportion to the degree of precision required; that the Coast Survey methods of observation and computation were guided by the one principle of doing the work as thorough-

ly as the present state of science and mechanical art permit; and that I would examine the records of past longitude campaigns, and inform him of the average amount of labor they had cost. A few days afterward, I told him that though the length of time and the quantity of work had varied very greatly, according to the weather, the state of the line, and many other incidental circumstances,—a fair estimate of the time and labor needed for observation and computation, amounted to about one person's labor for twenty-five months, or twenty-five persons for one month. I do not think that any other person was present, although it is not impossible. Everything contained in the above quotation inconsistent with, or in addition to this statement, I pronounce false.

The Accusers continue:

"There is obviously some mystery overhanging this subject, which the Trustees, professing their ignorance, leave to others to solve."

and they go on to make their insinuations relative to the disposal of the money.

Inasmuch as I believe this is the only point on any subject connected with the Observatory or its operations, in which the Accusers have owned the soft impeachment of "ignorance," it may perhaps be well to throw some additional light on these dark mysteries.

Mystery I. The sum of $2,000, appropriated by the Legislature for "determining the true meridian," was neither named by me nor by the Council, but by Mr. Olcott's lobby agent,—himself one of my Accusers (see page 123). Mr. Olcott is responsible for the estimate.

Mystery II. This mystery of the Majority is their own act. What they have paid is exactly $600. This, together with more than $300 besides, was disbursed by me; the items were given in the "Defence;" the vouchers are in my possession; instruments, apparatus and salaries were contributed by the Coast Survey.

Mystery III. That the work could not have been properly done for "less than $200" as "the very explicit letter" of Mr. Bond has been made to imply, is evident; 1st, from the considerations presented on pages 122 and 123 of this Reply; and 2d, from the facts already stated on the last page.

Mystery IV. The amount of the cash outlays was $928.94. Of this the Trustees paid $600, thereby earning $2,000; the Coast Survey paid $304.43, thereby obtaining what would otherwise have cost it more than three times as much; the balance, $24.51, I paid myself, thereby cheaply purchasing independence of any apparent indebtedness to the majority of the Board.

These mysteries are of the Accusers' own making, and are as simple of solution as those of Udolpho.

116. *Attack upon the Coast Survey.*

After giving the letter from Mr. W. C. Bond which the Accusers had "through the kindness of a friend, procured,"—and after again insinuating what they allege that they do not assert relative to the moneys,—they add (pp. 116, 117,)

"The whole subject, as it now appears, is eminently suggestive. It might be useful for those, who, in the discharge of official duty, may be called upon to vote for appropriations to the Coast Survey, to satisfy themselves whether it costs $2000 or $200 to determine the longitude of any particular locality."

The outlays for the field-work were, as the author well knew, neither $200 nor $2000; but $928.94, for 'Albany-New York,' and $904.25 for 'Bangor-Cambridge,' which latter measurement had to be subsequently repeated. The money was disbursed in the one case by myself, in the latter by Mr. Walker, and in neither by Prof. Bache. The amounts have been publicly stated, and the very items given, and the vouchers are subject to examination by any respectable person. All which Mr. Olcott and Judge Harris well knew.

The character of this remark is in keeping with Mr. Olcott's other attacks upon myself, Prof, Bache, and the works under our respective charge.

In October, 1857, he had said "We are willing to sink or swim with a Henry, a Peirce, a Bache and a Gould, as the only chance of immortalizing ourselves in this world."

In December, 1857, he had written to this very Professor Bache:

"I certainly was willing to co-operate with distinguished scientific men, and was proud to enlist as a subordinate under your banners. It [the Observatory] might never have been revived from the tomb of its repose, but through your inspirations." . . . .

"The services rendered by Prof, Henry and yourself in New York, enabled us to gain a footing there, and your identification with the enterprise has given it a passport to the confidence and regards of the nation."

In January, 1858, his language and that of his followers had been that

"they most gratefully recognize the valuable co-operation and advice which they have received from the Scientific Council, and the distinguished Superintendent of the Coast Survey, and will ever receive, with the greatest deference and respect, the suggestions of gentlemen whose names are so illustrious in science, and who are so disinterested in their efforts for its advancement."

Now, this same Mr. Olcott says, of this same Professor Bache, that he is

"accustomed to the exercise of arbitrary power, and not over scrupulous in the selection of the means with which to accomplish his ends."

Of this same Prof. Bache's acts as a member of the Council, this same Mr. Olcott says:

"The great want of the Scientific Council, in the emergency in which they found themselves, was power. It had not been conferred upon them and yet they must have it. They had no alternative but to do, as has often before been done by tyrants, *usurp* it. This they at once proceeded to do."

This same Mr. Olcott,—throughout the "Statement,"—sneers at, detracts from, and denounces, this same Prof. Bache; he attacks the Coast Survey in anonymous pamphlets and procures the preparation and publication of bitterly hostile articles in the newspapers,—because Prof. Bache is its Superintendent. He attacks the Smithsonian Institution, because Prof. Henry is Secretary and Prof. Bache is a Regent. He abuses the Light House Board because these gentlemen are members. He assails the Nautical Almanac, because he supposed (though erroneously), that Prof. Bache was connected with it in some unexplained way. All this Mr. Olcott has done, although anonymously, within the past three months, sending his attacks to all the members of Congress and to all the members of the Legislature of this State.

What has so transmuted Prof. Bache? What has wrought this mighty change in Mr. Olcott's mind?

Prof. Bache has dared to defend the character of the man whom Mr. Olcott undertook to "crush." He has joined with my other colleagues of the Council in preparing and publishing the "Defence of Dr. Gould;"—and he occupies a position which, from its prominence, Mr. Olcott supposed more easily assailable than that of the other two. The event has proved, however, that Mr. Olcott was mistaken.

117. *The American Method.*

On pages 117 and 119 is a passage to show that the claim made for the Coast Survey of having perfected the apparatus for determining longitude is unfounded. This same passage, word for word, formed an editorial article of the organ of the Trustees, the "Albany Statesman" for July 6, 1858!. The Accusers say that this claim

"is indicative of the true character of the gentlemen who composed the Scientific Council."

This reflection is wickedly false and "is indicative of the true character of" my Accusers. The only person quoted by the Accusers, against Prof. Bache says, in the Coast Survey Report for 1851, that the method of recording astronomical observations which is used in our longitude determinations has "grown up under the fostering care of the Coast Survey." Again in speaking of the same

"American method" he says;—"The electric method of recording astronomical observations, introduced by the Coast Survey," etc. It is well known, that this method, as applied to longitudes, was introduced and matured by Coast Survey officers, or by persons employed in connection with its longitude parties. Professor Walker while in charge of the longitude department of the Coast Survey induced Mr. Saxton, Mr. Bond, Prof. Mitchel, Dr. Locke and others to engage in this matter. Prof. Mitchel's apparatus *for right-ascensions* was then tested during the campaign between Cincinnati and Philadelphia. Prof. Mitchel's apparatus *for declinations* is quite a different thing, though confounded with it by the Accusers in their desire to make capital against Prof. Bache, whose generous words of praise of Professor Mitchel and others, they deceitfully quote as conflicting with the letter of the Council to the Regents! So the remarks of Prof. Peirce applying to Prof. Mitchel's *declination* apparatus, are ignorantly or maliciously set down as applying to the method of *telegraph longitudes*, and contradictory to his own letter! So, too, with the second quoted remarks of Prof. Bache. Mr. Olcott, who, as shown by his letter of Nov. 18, does not distinguish latitude from longitude, is a fit leader for a majority who do not know right-ascensions from declinations, and the two together are model managers of the scientific concerns of an observatory! Yet Mr. Olcott assumes to sit in judgement on my abilities as a practical astronomer; and the Scientific Council are made to condemn themselves by misstatements such as a pupil of a High School would be ashamed to acknowledge. The attempt to use the generosity of Professors Bache and Peirce against themselves is one of the meanest in the history of the controversy. It has not the audacity of garbling and fabrication, nor the easily contradicted directness of a simple falsehood.

I leave this point after quoting a paragraph from the communication upon this new method, which the much lamented Walker made to the Cambridge meeting of the American Association for the Advancement of Science, in the same communication which contains the account of Prof. Mitchel's registering apparatus:

"I deem it, therefore, but a duty to the service in which I am engaged, to declare in the presence of the members of the Association, that, with the single exception of the experiment between Baltimore and Washington, by Captain Wilkes, in 1844, I know of no telegraph operations for longitude, and of no step in the improvement, or perfectionment of the art in Europe or America, which have not been the work of the officers proper of the Coast Survey, or of commissioned officers and civilians acting temporarily as assistants."

118. *The Council's Resolutions of July 2.*

The Trustees, or rather Mr. Olcott, in their name, had refused a hearing to the Council. Hoping against hope, and determined to exhaust all measures of conciliation, the Council had addressed to the Board a communication offering for their acceptance three different modes of compromise. This may be found on page 102 of the "Statement." This communication was placed in the hands of a member of the Trustees to lay before the Board. On the refusal of the President to call a special meeting for the purpose of presenting them, they were placed in an envelope, and handed personally to him.

The Council offered, in the first resolution, to take charge of the Observatory themselves; in the second, to refer the whole of the matter in controversy to arbitration; and, should both of these offers fail to meet acceptance, they asked, in the third, that a fairly constituted Committee be appointed to meet them. Surely they might reasonably have expected their first proposition to be accepted; for the Trustees had then no known difficulties with the Council, and it involved no recognition of myself. The idea that they were not prepared really to take charge of the Observatory, which is stated to have been the objection to that arrangement, was founded upon dishonoring suspicion. Besides, the sincerity of the Council could readily have been tested; and there was an easy remedy, if they failed in their pledge. But there would have been no failure to redeem it. The members already had the necessary understanding as to the time during which each of my colleagues could personally attend to the Observatory.

If the Trustees felt that their cause was a good one, why not submit it to arbitration, which is always a measure of conciliation? Lastly, however "inharmonious" I might be, what had the Council done, that they should be refused a hearing by the Board? After they had taken the pains to convene in Albany as a Council, why were even their "advice and suggestions" not to be allowed to reach the Board?

Even in that resolution of Jan. 19, by which from being the recognized Council of the Observatory, their functions were attempted to be reduced to making suggestions and giving advice to the Trustees; by which they were acknowledged merely as counselors of the Board, although by another resolution, passed in the same breath, the charge of sustaining the scientific operations of the Observatory had been conferred upon them,—the Trustees promised at all times to listen to their advice and suggestions. The President, however, now took upon himself even to deny them a hearing; unless as a preliminary, they would

recommend a successor to myself. His letters on pages 102 and 103 of the "Statement," show this extraordinary procedure on his part. And while actually the relations of the Scientific Council with him were such that his own words expressed "the most profound regards for them individually, and for the exalted positions which they occupy" (see his letter of 1858, June 30,) he declined to submit a proposition to the Board, in which they severally offered to occupy the position of Director. Had he desired to know the details of their plan, these would have been at his service; but he refused their recommendation, invited by his own letter, shut the door against all their propositions of conciliation, and actually refused the application of one of their friends in the Board, that he would call a meeting to receive and consider the propositions. On receiving the President's reply, the Council again addressed him, stating that their propositions had been addressed to the Board of Trustees, and respectfully requesting that he would lay them before that body. To this letter they did not even receive an answer!

The Council then having made a thorough examination of the charges in Mr. Olcott's Manifesto, passed the following preambles and resolutions, in which they tried the final experiment of putting their conclusions in the form of "*advice.*" The encouragement and satisfaction afforded me, by such words from such men, outbalance the vituperation of twenty Manifestoes, and the plausible slanders of a dozen "Statements."—With the approval of Professors Henry, Bache and Peirce, I can easily bear the calumnies of nine times nine Olcotts and Harrises!

Whereas, The Scientific Council have received the resolution of the Trustees, demanding the removal of the Director; *whereas*, they find that Dr. Gould has been condemned without being heard in his own defence; *whereas*, the Trustees have resisted all the attempts of the Scientific Council to obtain for Dr. Gould the opportunity of meeting the charges which have been made against him; *whereas*, these charges appear to be mostly frivolous, with the exception of the two charges of incompetence and peculation; therefore,

Resolved, That the Scientific Council must advise the Trustees that their persistence in their present course of removing the Director is opposed to all the recognized principles of justice; and is so utterly at variance with the system of guardianship, by which the laws of our country protect the rights of our citizens against every form of despotism, that it will be regarded as a bitter and burning disgrace by the whole community, and will not fail to obstruct all further contributions for the support of the Observatory.

Whereas, The Scientific Council have carefully examined the statement which has been transmitted to them by the Secretary of the Board of Trustees, accompanying the resolution upon which such removal is required; *whereas*, they do not find in this statement any reasonable foundation for the serious charges which have been made against the Director, *whereas*, they have examined the voluminous documentary evidence which Dr. Gould has transmitted to them in his defence, *and whereas*, they find in the evidence the triumphant refutation of all the charges which are made against him; therefore,

Resolved, That they must advise the Trustees that the removal of Dr. Gould would be a gross violation of their obligations to him.,

Whereas, This Council have carefully examined the scientific progress of the Observatory, and find it in all respects to be ably and judiciously conducted; *whereas*, they find that the labors of the Director and his assistants have been characterized by the utmost zeal and energy; *whereas*, they find that no opportunity for astronomical observation has been permitted to pass unimproved; *whereas*, they find in the character of the work which has been already done, and in the unrivaled Meridian Circle which has been constructed under his direction, the most indubitable proofs of the greatness of his capacity for astronomical observation; therefore,

Resolved, That they must advise the Trustees, that the removal of Dr. Gould will be an irreparable injury to the scientific operations of the Observatory.

Whereas, The Council are persuaded that under the circumstances of Dr. Gould's removal, no honorable and trustworthy astronomer would be willing to occupy his place, and take unrighteous possession of the splendid instrument into which the suggestions of his genius have been incorporated by its celebrated makers; therefore,

Resolved, That they cannot, by advice, or any other way, acquiesce in his removal.

Whereas, The Scientific Council are informed that the Trustees decline all farther personal intercourse with Dr. Gould; therefore,

Resolved, That an Executive Committee of their body be appointed, whose duty it shall be to conduct the scientific administration in all its relations to the Trustees and the general visiters of the Observatory.

Resolved, That for the month of July, Prof. Bache shall constitute the Executive Committee; that for the month of August, Prof. Peirce shall constitute it; and for the month of September, Prof. Henry.

Then, and not till then, Mr. Olcott convened the Board;—but without previous notice to the Council. The Trustees met July 3, passed a series of preambles and resolutions given by the Accusers on page 123, and adjourned.—To the best of my knowledge they have never been convened since that time.

Among their preambles and resolutions were the following. The reader will appreciate them correctly:

And whereas, denying the authority of this Board to control the affairs of the Institution, Dr. Gould has refused to submit to its action and appealed from its decision to the Scientific Council, and that body, assuming powers with which they were never clothed, and exercising authority which, as they can but know, it was never intended they should exercise, have constituted themselves a tribunal to sit in judgment upon the legitimate action of the Board, and have, with surprising assurance, assumed to condemn and reverse such action; and having done this, have, without authority or color of right, and in defiance of this Board, constituted themselves an Executive Committee to manage the affairs of the Observatory; now, therefore,

Resolved, That this Board, impelled by the exigency of the circumstances, regard it as their imperative duty to declare, and they do hereby declare, the relations which have heretofore existed between the Trustees and the Scientific Council, to be dissolved and terminated.

Resolved, further, That this Board will feel constrained to regard the further occupation of the Observatory premises by the gentlemen composing the Scientific Council, or any other person by their authority, as a violation of the legal rights of this Board, so clear and manifest that it cannot pass unnoticed; and that

the President of the Board be authorised, in his discretion, to take all necessary measures to secure the posession and control of the property of the Institution.

As has been already stated more than once, a "notice to quit" was immediately sent to the Council by Mr. Olcott,—but he found himself able to employ no legal measures. After six months we were ejected by a force of men without color of law, 1859, Jan. 3. Admittance was refused to me upon peril of my life, and my assistants in the building were expelled by violence.

The Accusers on pp. 107–123, discuss the resolutions of the Council, last cited, endeavoring to hold them up to odium as *usurpers of power*!

119. *The "Defence of Dr. Gould."*

This publication of the Council was prepared by them immediately after the last resolutions of the Trustees,—and was published exactly one week afterwards. It placed my character and reputation honorably before the public, and it reviewed and disproved Mr. Olcott's falsehoods one by one; in the same mode which I am now attempting to follow in this Detailed Refutation.

Of the "Defence," and its Authors, the Accusers say, (p. 105:)

"At the close of their judicial labors, these men were able to present, as the result of their "rigorous examination," no less than THIRTY-TWO points, methodically and numerically arranged, in all of which the Trustees are condemned, and Dr. Gould acquitted—in which the Trustees are adjudged to be wrong in everything, and Dr. Gould in *nothing*. The entire vocubulary of compliment and eulogium, in which these Scientific gentlemen are said to be unrivaled proficients, has been exhausted in extolling the merits of their colleague. This single fact is quite sufficient to show what the Trustees had to expect at the hands of such a tribunal."

The object of this statement is, of course, to intimate that the Council were unjust judges; since it would, not unnaturally, be assumed by a public unacquainted with any of the persons concerned, that a quarrel was impossible where the offences were on one side alone. This has been a most serious disadvantage to me, contending as I have been against enemies whom no principle of honor, truth, justice, law or Christianity restrains.

The Accusers continue, pp. 124–5:

"One principal object of this publication seems to have been to divert the public attention from their acts of lawless usurpation." . . . .

. . . . "To go through the entire pamphlet and correct all that is erroneous, would swell this statement beyond the limits which the Trustees feel constrained to assign to it."

. . . . "These gentlemen set out by stating, that *by the use of their name*, and *under the pledge of their management*, the large donation of Mrs. Dudley and many other smaller donations had been procured. This point has already been alluded to. These gentlemen in their high appreciation of their own well-earned fame, have been known, sometimes, to assume, as their own, the credit which is due to others of less bold pretensions."

And they then proceed, on pages 125–163, with an endeavor, by tricky perversion and sophistical special pleas, to prove misstatements upon the part of the Council.—These several points it now becomes my duty, in pursuance of the plan of this Refutation, to consider.

120. *Mr. Pruyn's Guaranty.*

Three pages are devoted by the Accusers to improving the opportunity of attacking a gentleman, who has honored me with his sympathy and support. To Mr. Pruyn's admirable letter, re-published by Mr. Thacher in his "Key to the 'Trustees' Statement," and in which the whole matter is fully and clearly set forth, I have already had occasion to refer.

There are several points to be mentioned in this connection,—all of them showing the allegations of the Accusers to be either false or otherwise dishonoring to them.

1. Prof. Bache, before entering into any arrangement in 1855, had required some responsible indorsement, in guaranty of the feasibility of the measures promised by Dr. Armsby. The latter offered to obtain it from Hon. J. V. L. Pruyn, and thereupon went to Newport to find him.

2. Dr. Armsby declared to Prof. Bache, that although he did not succeed in finding Mr. Pruyn at Newport, this gentleman entered fully and warmly into the plans at Albany. Well would it have been for all concerned, if Dr. Armsby had never been trusted or believed;—so fawning then, so intriguing afterwards, so venomous now. Well, if the smoothly insinuating ways of this plausible man had never entangled the Council.

3. When I was about to present an account of the Observatory to the audience assembled at the Inauguration ceremonies, in 1856, *Dr. Armsby gave me the information on this subject*, and asked me to bear testimony to this early encouragement given by Mr. Pruyn. At that time I was not acquainted with all the circumstances, having been compelled by illness to leave the Providence meeting before its close.

4. When my remarks were given in writing to Dr. Armsby, for publication, I remember distinctly that he again recurred to the circumstance, and that I pointed to him the passage referring to the subject, as it has stood in print since that time.

121. *The Broken Barometer.*

This petty subject has been made the theme of so much misrepresentation and garbling, and was so fully explained in the "Defence," that little comment will be needed, when the citations of the Trustees shall have been put side by side with the genuine language. This I will do; referring also to Mr. Spencer's and Mr. Gavit's letters in the Appendix.

From the "Statement," p. 130.

Take another of these "loose statements." These Defenders say:

"Dr. Gould not only purchased no Thermometers or Barometers abroad, *but he placed none in the charge of Mr. Gavit.* . . . . . We cannot hold Dr. Gould responsible for the non-recovery of the insurance, which business clearly belongs to the financial agent of the Trustees.

From the "Defence," pages 7 and 8.

"Dr. Gould not only purchased no barometers or thermometers abroad, but he placed none in the charge of Mr. Gavit. Mr. Gavit, who subsequently made these small purchases, having found it impracticable to obtain authority to carry the instruments in the original packages, unopened, across England, was obliged to intrust them to the express, and some of them were broken. We cannot hold Dr. Gould responsible for any part of this, nor for the non-recovery of the insurance, which business clearly belongs to the financial agent of the Trustees, to whom Dr. Gould more than once addressed a reminder on this very subject."

Again, the witness as to the "looseness" of these bold assertions shall be Dr. Gould himself. In a letter to Mr. Olcott, dated January 26, 1856, he writes:

"*Gavit will take charge* of the Barometers and Thermometers home from Paris. *I have written to him about it.*"

What I wrote to Mr. Olcott, 1856, Jan. 25.

By the expedition of Spencer and Gavit, or either one of them, to Europe, an admirable opportunity is afforded to obtain a standard barometer, and thermometer. . . . . The trouble has been to find some one coming from Paris who understands how much care they require in transportation and is willing to give it. I will write to Spencer, asking him to attend to it; and Gavit will take charge of bringing them if you ask him.

On the same day he wrote the same to Dr. Armsby.

Postscript to my letter to Dr. Armsby the same day, marked "Private."

Mr. Gavit or Mr. Spencer will doubtless be willing to take charge of a barometer and thermometer home from Paris. The barometer has to be carried about *in the hand.* I have written about it.

On the 14th of August, 1856, Dr. Gould writes to Mr. Olcott:

"The invoice inclosed pertains to the Barometers and Thermometers *purchased by Gavit* in Paris."

What I wrote to Mr. Olcott, 1856, Aug. 14.

The invoice pertains to the Barometer and Thermometers purchased by Gavit in Paris, and which were not quite ready in season.

What I wrote to Mr. Olcott, 1857, Oct. 3.

And nearly fourteen months later, on the 3d of October, 1857, Dr. Gould writes to Mr. Olcott respecting the insurance on the broken Barometer as follows:

"*That Barometer matter, it belonged of course to me to see about, and it* HAS NOT BEEN FORGOTTEN AT ANY TIME."

That barometer matter it belonged of course to me to see about; and it has not been forgotten at any time. Expecting Mr. Gavit to act in the premises, delicacy prevented me from doing more than ask a question now and then, and I was under the impression that he was taking steps in the premises.

Finding, when last in Albany, that he had done nothing, I mentioned the matter when writing to you.

Neither of the Trustees had any share whatever in ordering these Barometers and Thermometers.

Comment upon this very loose statement of the gentlemen of the Scientific Council, the enthusiastic, if not discreet "defenders" of Dr. Gould, is unnecessary.

The order for the barometer and thermometers was given to Mr. Spencer by Mr. Thomas W. Olcott!

The collation of these two columns will probably suffice for any honest man. The garbling of the last quoted letter has been exhibited in §58.

The original puerile, but malicious charge of Mr. Olcott in his Manifesto, was as follows:

"Some of the Barometers and Thermometers which Dr. Gould purchased abroad, were placed in charge of Mr. Gavit, and were broken on the voyage; and although Dr. Gould has been often spoken to on the subject, it is not known that any steps have been taken to recover the loss from the insurers."

Beside the reminders so frequently addressed to Mr. Olcott, I find the following sentence in a letter from me to Dr. Armsby, so early as 1856, Oct. 22:

"What was the result of Gavit's reclamation of the insured value of the broken instruments?"

The extracts which I have given speak for themselves.

122. *The letter about the Dome.*

The deliberate fraud in connection with this letter has been exhibited in Part First, pages 27, 28; where it was cited as an illustration.

123. *Dr. Gould's demands upon the Trustees.*

From Mr. Olcott's Manifesto:

"To say nothing of an application from Dr. Gould, in February last, for a new dome, which would cost several thousand dollars, he has, since his removal here, asked, not for a few hundred dollars for mounting the instruments, as agreed upon, but for more than $3,800, with the certainty that this amount will be greatly increased before the instruments can be mounted." . . . .

"We have, as before stated, applications in writing from Dr. Gould, asking for over $3,800, instead of only a few hundred dollars, to which he was by agreement confined. This does not include $600 advanced to Dr. Gould for determining the longitude and $300, the application for which may perhaps be deemed as withdrawn."

From the "Statement of the Trustees," pp. 131 and 132:

"The next 'loose statement' in Mr. Olcott's letter is exposed by the Council in the following language:*

'Neither the estimates of Dr. Gould for mounting the instruments, nor his demands upon the Trustees, exceeded $3,800, as alleged by Mr. Olcott. The

* See Defence, § 2.

estimates, subsequent to January 21, were requested by the Trustees, and, as will be subsequently shown, *did not reach an amount in any way comparable with this sum.* The details of them we give in the proper place.'

"Turning to these 'details,'* which we are told are to show that Dr. Gould's demands upon the Trustees since January *did not reach an amount* IN ANY WAY COMPARABLE with the sum of $3,000, we find them spread over several paragraphs. They are not given in a tabular form, as the Trustees, for the sake of convenience, will arrange them; but, as stated by the Council, they are as follows:

Balance of longitude appropriation,	$1,500 00
For casing piers,	390 00
For digging well, &c.,	324 00
For Mr. Bygate's salary,	700 00
For Messrs. Farmer and Polsey,	258 98
For batteries,	110 00
For rare old astronomical books,	350 00
Total demands by the Council's statement,	$3,632 98

"In addition to these amounts thus stated by the Council, Dr. Gould had asked for $300 for Pistor and Martins, and $300 in addition to what is stated above, to Farmer and Polsey; which would make the sum *greater* than that set down in round figures by Mr. Olcott.

"The Trustees are willing to believe that the Council did not sum up the items set forth in their 'Defence' of Dr. Gould, and were ignorant of their aggregate amount; but even then, it was rather a 'loose statement,' and shows that neither the services of Prof. Peirce, nor the 'Calculating Machine,' could have been put in requisition."

The distribution of the promised balance of the longitude appropriation, $1400, (the Accusers call it $1500) which makes up a large part of the sum in question, was proposed by me *before*, and not "subsequent to, January 21," a date named by the Council for the very reason that it excluded the suggestions made on the subject of this balance. The Accusers adopt the date, but make this balance figure at the very head of their account. If, however, we leave this point,—the fact remains, that (although two members of the Council heard Mr. Olcott promise this sum towards carrying on the Observatory for the current year,) yet it was not "demanded," but the mode of its distribution simply recommended and formal permission asked to apply it according to this mode, in compliance with the advice of Mr. Olcott, who had orally given not only the permission, but the promise also!

In order to make up the sum of my alleged demands as near to the $3800 as possible, the Accusers, in bad faith, actually include Mr. Bygate's salary of $700, which they well know has neither been demanded of, nor paid by them!

Also $258.38 for Messrs. Farmer and Polsey, in reimbursement to me of my payment of their bills for work ordered in the year 1856!

* See Defence, § 11.

Also $350 for rare old astronomical books obtained by me in conformity with a request of the Managers nearly a year previous, and which were ordered previous to the difficulties and compact of December 1857!

So much for these wicked calumnies, regarding money matters.

It will be remembered that on page 31 the Accusers also allege that they had been charged $200 for bringing the calculating machine into use, although no account of any kind for this work was ever presented to them, and the total expenditures (by me) amounted to less than $15.

In fact, not one tenth of this amount of $3800 has been given me for any bills not contracted previous to my coming to Albany. And besides the gratuitous labor of myself and my noble assistants, I have borne from my own slender resources the total current expenses of the institution. What has Mr. Olcott to complain of?

The "Statement" of the Accusers goes on to assert in the next paragraph that I asked for $300 for Messrs. Pistor and Martins. This is untrue. The amount was sent by me personally to Messrs. Pistor and Martins, rather than have the institution disgraced by an undeserved niggardliness; and the fact was incidentally mentioned at a subsequent period in a note to Mr. Olcott, (as well as orally at the time, if my memory serves me right,) that he might have the opportunity of offering its reimbursement, if so disposed.

The assertion that I had applied for "$300 in addition for Messrs. Farmer and Polsey," is sheer fabrication, without basis of any kind. The entire balance due them, according to their own very reasonable bills, was promptly paid by me, and subsequently refunded by the Treasurer of the Observatory. It amounted to the $258.28 mentioned above.

What antagonists for an honest man to contend against!

The first, fourth, fifth and seventh of the items brought up by the Accusers in their endeavor to make "an amount in any way comparable with the sum of $3800," (the Accusers, ingeniously availing themselves of a palpable typographical error in a portion of the Second Edition of the "Defence," write it $3000,) are thus clearly seen to have been fraudulently introduced.

The two additional ones, named in the next paragraph, are fabrications.

And the only "applications," since my removal to Albany, are thus seen to have been $824—instead of "more than $3800." The several items are:

For clothing and casing piers,	$390 00
digging well, &c.,	324 00
galvanic battery,	110 00
	$824 00

The first of these was "appropriated," yet owing to the obstacles thrown in my way it became necessary for me in protecting my own credit and the persons employed, to pay the entire amount myself.—Of this, a part (chiefly for the clothing) was refunded, but the bill for casing was repudiated and left upon my shoulders.

The item "for digging well, &c.," was appropriated, but the amount was placed at the disposal of a sub-committee, not at mine. I had, from the necessity of the case, been compelled to have a deep well dug, and pipes laid; and the cost of this, $78.69 was refunded. None of the remaining amount passed through my hands.

The third item was appropriated, but kept from me in the same way, so as to throw the expense upon me personally—though ultimately refunded.

So that the sums actually refunded from the foregoing $824. are:

For clothing and casing,	$169 02
well, &c,	78 69
battery,	110 00
	$357 71

It may be proper to add, that at the request of Mr. De Witt, the Vice President of the Board, (whose name has been used to make up the Nine,) I superintended the cutting away of a hillock near the dwelling-house, and paid the bills.—The whole expense amounted to but a small sum, and was refunded without obstacle.

124. *Prof. Bache's Pledge.*

This subject has been fully considered in Part First of this Reply, where the unblushing falsehoods of the "Statement" on this subject are exposed. Yet I will add a few words here.

The Accusers say, (p. 133:)

"The 'pledge' of Prof. Bache was to supply a Transit instrument for time, at a cost of $1500, to be mounted and used in the Dudley Observatory. This instrument was purchased in Europe by Dr. Gould, in redemption of this "pledge." That it was *the* instrument agreed to be furnished by Prof. Bache is sufficiently evident from the fact that a room in the Observatory was prepared for it at a cost of several thousand dollars; that it is now, and has been, for a year and a half past, at the Observatory; *and that the freight and charges upon it, amounting to about* $300, *have been paid by the Trustees.*"

It was absurd to venture upon a statement so easily refuted, but the falsehood was already ventured on page 9 of the Second Attack.

The letter of Prof. Bache shows that he explicitly stated the instrument was to be one of those used in the survey, and the Council stated only the "simple truth" when they averred that such a one had been "mounted in April, and has been in use on every clear night since that time." Though this instrument renders important service in connection with the meridian circle, it is one of those which Mr. Olcott has applied to the Secretary of the Treasury to have removed!

There are no less than six false statements here in a paragraph of eleven lines. The pledge of Prof. Bache was *not* to supply a transit instrument for time, at a cost of $1,500. The promise which he did give was *conditional* upon the procurement of a heliometer for the proper use of which, the aid of a transit instrument is essential.

The instrument purchased by me was *not* in redemption, therefore, of this or any other pledge. It was not *the instrument* agreed to be furnished. Nor does the fact that a transit room was prepared to mount it, prove this. The assertion that the transit room of the Observatory was prepared to receive *this* particular instrument is false and absurd; as also is, in my belief, the assertion that the preparation of the room to fulfil its *original and only* design, was at a cost of several thousand dollars. As to the freight and charges, I myself paid the expenses of packing, in Germany, amounting to $77, and have the vouchers. The Trustees now boast of paying $300 freight and charges,—while the President actually applied to have the amount refunded *by the Coast Survey*! and this, too, before his application for the removal of the instrument itself! And, furthermore, the Executive Committee did actually appropriate a hundred and fifty dollars, contrary to my advice, for mounting it!

125. *The Reckless Statement of the Council.*

Discoursing of the large Transit-instrument, on pages 133 and 134, the Accusers cite two passages from the "Defence," and add, concerning the Council, its authors:

"And then in their summary, at the conclusion, they say: '*The falseness of the statements in regard to the large Transit instrument are shown.*'

"To say that such a statement is very 'loose,' will hardly do. It is very *reckless.*"

If the Council did not show in the "Defence" the falseness of *all* the statements in regard to the large transit, they certainly did show that many of them were false, so as abundantly to justify the summary that "the falseness of the statements in regard to the large transit

are shown." It seems quite impossible for the Accusers to adhere to truth.

This wholesale mode of falsifying, which has been well described by one who knew such men, by the phrase, "nothing so easy as lying," is what gives point to the "Statement," the public not being able to conceive that men of decent positions could resort to such modes of defence or of assault.

126. *The Rejected Pier.*

This subject, so harped upon by Mr. Olcott and his fellow Accusers both in the Manifesto and in the "Statement," has been explained to some extent by the Scientific Council. (Defence, § 3.)

When the circle-piers arrived in September, 1856, soon after the Inauguration, I received a letter from Dr. Peters, at Albany, of which I translate a portion.

From a letter of Dr. Peters to me.

ALBANY, 1856, Sept. 18.

"I am in so great excitement that I would not disturb you with these lines, did I not hold it absolutely my duty. The canal boat with the cap stones and the three remaining meridian piers arrived yesterday. Yesterday afternoon, before I went up to the Observatory to my work, I looked at them hastily. But I was painfully overcome to find that both the circle piers longitudinally (in a vertical section north and south) were traversed by a crack, or rather a thin flint-like gangue, of the same nature as in some of the small pieces for the collimator piers, which you rejected for this reason. Early this morning I found Dr. Armsby, and told him that we could not venture to accept these two piers. He answered me that he had seen them, and had also been much disappointed, but that we should have to accept them; that we could get no others in the whole country; that we should otherwise have to take granite, and that this could not be done within the year. He begged me almost imploringly to make no mention of these gangues, but to have the stones quietly put up. If, after the instrument was mounted, they should prove to be unfavorable, they might be pulled down again, and other stones put in! . . . . But how great is now my indignation at finding, on more careful investigation, that one of the circle piers is patched at the base! A piece measuring one foot by six inches, and eight inches high, has been let in, fastened below by two iron bolts, and all this smeared over and concealed with clay, colored like the stone. I ask you now whether I shall let these stones be put up. How I wish you were here! Could you not return for a single day?—otherwise I entreat you to give me peremptory instructions. . . . . Dr. Armsby intreated me to write you nothing on the subject, but since I have seen this patched-in piece, I cannot be silent."

I returned to Albany at once, examined the stone and found that besides containing serious sutures filled with a soft and friable material, they were also of a form not in conformity with the drawings which I had had made at Cambridge, and sent on to Dr. Armsby, as the basis of a contract. Still these were points which I should have let pass if desired by Dr. Armsby. The fatal defect was the broken base, bolted on with metal. To have accepted it would have been ruinous to

future precision in the observations. I so reported to the managers, protested against its acceptance, as not only non-conformable to contract, but fraudulent,—inasmuch as this serious and fatal defect had been most carefully concealed,—and I urged that the quarryman at Lockport, of whom I knew nothing, not even his name, should be made to furnish another in the place of this vicious one.

Dr. Armsby informed me soon after, that the quarryman at Lockport, had *pronounced it impossible* to obtain another of sufficient size; but that Mr. Hague, (who had charge of matters of construction under the Managers), had undertaken to find proper stones at a much cheaper rate at Kingston, on the Hudson.—And a few days later a specimen of the Kingston stone was sent to me at Cambridge, and pronounced perfectly satisfactory.

On the 10th of October, 1856, I wrote to Dr. Armsby thus:

"I have a letter from Mr. Hague at Albany. He forwards a specimen of the *Kingston* stone, and seems not to have been to *Lockport* at all. The character of the stone is satisfactory to me; as for the advisability of going to another quarry, you and Mr. Olcott will judge. I understood that it was decided that he should investigate matters at Lockport under any circumstances."

"How is it that Turner had found out *on Saturday*, that we wanted other stones from Lockport! If you do not look sharp you will have to pay double for the circle-piers. I am sorry Hague did not go on."

On the 18th of October Dr. Armsby wrote me as follows:

ALBANY, Oct. 18, 1856.

"All seems to have gone on prosperously at the Observatory under Mr. Hague's supervision. He will inspect and credit all bills before Mr. Olcott or myself will put our names to them. He has made most favorable arrangements at Kingston for the speedy completion of the great piers. . . . . The bill from Lockport has arrived. It is $1400—and $1000 has been paid. The six stones, viz: 2 capstones and 4 piers, were to have been $750: the balance is for the 4 collimator piers and for transportation. We have only paid Turner $500 on account, so you perceive we have yet the power to save ourselves from loss. *Do not trouble yourself* about these matters,—we will look sharply about us, and not be imposed upon more than we deserve. I can hardly believe that Mr. Hague's expectations at Kingston will be realized in every particular as to time and expense, but we shall see. I have great confidence in his ability and integrity. How unfortunate that he was not here to have taken charge of the whole work from the commencement. We should have saved much time and money. But do not fret yourself about what cannot now be helped. We have, all of us, tried to do our best under the circumstances, and have no cause for self-reproach, or for reproaching each other. I have not seen Turner since you were in Albany,—or had any communication with him, except in the presence of Hague, and then simply to say that Mr. H. had been employed to take charge of everything. Mr. Turner knew, before you came to Albany, that the stones probably would not answer, and had been requested to write and see if *perfect* ones could be obtained and guaranteed. I understood, as you did, at New York, that Mr. H. was to go to Lockport and investigate; but it seems that he did not feel authorized to do so until my return; or Mr. Olcott did not see fit to send him there, and his success at Kingston, and the arrival of the Lockport bill, seem to render this step now unnecessary."

The reader will be astonished when I inform him that I have evidence in my possession, proving that Mr. Turner the agent of the

Managers went to Lockport, and was shown the vicious stone.—That by the directions of Dr. Armsby he had the patch put on and concealed, all in the hope that I should never know it,—although it might destroy the usefulness of the instrument. For Dr. Armsby never cared that the Observatory should be serviceable to science; he only wanted a show, which he and his co-trustees might exhibit to their friends.—It was in order that I might not discover this trick that Mr. Hague did not go to Lockport, as it was promised he should, to examine if a better stone might not be found.—And I now know, that a stone of ample size was actually quarried in Lockport, and the fact reported to Dr. Armsby, at the very time that, according to his letters, and the Manifesto, and the "Statement," "the rich quarries of Lockport could not furnish the requisite supply."—And that, at the time when Armsby was assuring me they would "not be imposed upon more than they deserved," he had actually certified to the bill and procured its payment,—lest his own participance in the trick should be detected!

Such are the men against whose calumnies I must defend myself.

The language of Mr. Olcott's Manifesto,—repeated on page 134 of the "Statement"—was as follows:

"We . . . . too late discovered that Dr. Gould's superlative precision and transcendental exactness in ordinary matters are, in this respect, allied to his determination of longitude; that the cost "increases in a more than cubic ratio with the degree of precision." The piers must be built of stones so large, and so free from the least imperfections, THAT THE RICH QUARRIES OF LOCKPORT COULD NOT FURNISH THE REQUISITE SUPPLY. One of those stones, whose rejection cost us about $1000, now graces our grounds, a monument of our folly, in yielding to excessive particularity."

In contrast with the words which I have emphasized, I will give extracts from two letters of Mr. Olcott himself. He wrote me

1856, Oct. 31. "We have met with disappointment in the Kingston stone. Some flaw has been discovered, or some has happened to every stone gotten out. We may have to go to Lockport after all. Shall know to-day;"

and

1856, Nov. 10. "Mr. Hague has just called to say that he has succeeded in getting out one fine stone at Kingston, and expects another in a day or two. We also learn that two fine stones are on hand, and ready for us at Lockport, should they be wanted."

The rejected stone forms indeed a prominent object in the Observatory inclosure and I have studiously avoided removing it from the spot where it was first deposited. There it is, exposed to the full inspection of every passer-by;—a monument and an eloquent witness of the wickedness of two of these Trustees in yielding to their inhuman malignity; and of the weakness, if nothing worse, of the remaining seven in

yielding to the "influence" of Mr. Olcott;—yielding, although the motive might be to destroy the good name and usefulness of an honest man, who had never injured them or treated them unkindly, and whose only crime consisted in unwillingness to become a pliant tool, even though his refusal might entail all the consequences of a "Want of Harmony."

127. *The "Ingenious Crane."*

The Accusers, in their anxiety to lose no opportunity of putting me in the wrong, repeat in their "Statement" with some additions and expansions, the charges in relation to this subject which Mr. Olcott originated and which have already been fully answered in the "Defence." Professor Bache, Peirce, and Henry, have explained this subject so clearly, that I will quote their words. The subject is one of which scientific men are alone competent to judge. The Council say; (pp. 12 and 13):

"The apparatus for placing the great piers by which the meridian-circle is supported, we consider as being at once ingenious, economical and well contrived. The success with which it has accomplished its work is the best demonstration of its excellence. Stones weighing over seven tons each were to be brought into place with a degree of accuracy with which an ordinary mason could not lay even a brick or corner stone. To talk of placing them properly without some such apparatus, is to utter ridiculous absurdity; and this case well illustrates the many practical difficulties with which Dr. Gould has had to contend, in his successful efforts to grapple with the difficult problem of mounting an instrument of such unexampled magnitude and delicacy. . . . . It may be that masons offered to place the stones in position for one-quarter the cost of the machine. In so doing, they showed an ignorance of the difficulty of the problem; an ignorance perfectly excusable in them, although its adoption is not excusable in Mr. Olcott."

The story of the plans being sent to Washington is not true. They were never sent there; although had they been, it would have been no occasion for criticism but rather for commendation. How much the machine cost, I do not know; but I do know that no less complicated arrangement would have done the work. The whole of the remarks on page 136 of the "Statement" is a series of untruths. The machine consists of a boom derrick, with an apparatus for rotating the stone and for moving it to or from the upright shaft.

The Accusers say:

"The Trustees, ignorant as they are, are not so ignorant as not to know that great precision is necessary in placing such piers. But they also suppose that to move them to their place and elevate them, is a very simple and easy matter. A competent mechanic could do it all."

The object of this crane was to do the work of *placing* and *adjusting;* the mere raising and elevating could be done easily,—and was done by this same machine constructed for the purpose of adjusting

them!—The quibble in this passage will therefore be readily seen. The Accusers continue:

"And then, to crown the whole, the entire front wall of both wings of the building had to be taken down to allow this machine to operate."

The front walls of both wings were already down; not "to allow the machine to operate," but to permit the enlargement of the wings! That this had been against my wish in the West wing or Transit room has been more than once mentioned!

128. *The Shutters.*

The unwonted size of the meridian rooms, which must be provided with unbroken openings extending from the northern to the southern horizon,—the length being 35 feet, and the height about 14,—rendered it necessary to devise new and peculiar apparatus for opening and closing the shutters or trap doors of these openings. The weight of these shutters, their distance beyond reach, the necessity of their closing so tightly as to form a full protection against the weather, and especially against the penetration of snow, in the very bleak situation occupied by the Observatory, the importance of rapid opening and closing, of ready access to machinery, if desired, of neatness of appearance, all rendered the problem one of great difficulty.—Through the able assistance of Mr. Hodgins, all these difficulties were surmounted, and I have been fully satisfied with the success of the adopted plan. I do not think that any less costly plan could have accomplished the desired end. As to its expense I know nothing. The work was done (without a contract, I believe), by Mr. R. H. Pruyn, a Trustee.

The inadequacy of construction of the dome has been already alluded to; and the fact mentioned that when the tinning was removed from the aperture through which the instrument must point, the structure was found incapable of sustaining its own weight,—it having been braced by the strength of the roof tinning alone. Yet in their determination to "crush" me, my Accusers say:

"In 1857,—in the midst of the financial troubles of the country,—Dr. Gould directed the architect to prepare plans for flexible iron shutters—a thing, as the Trustees understand, unknown in any Observatory in the world. The plan has been executed. The shutters have been made, and now they are too heavy for the dome. A new dome must be built, at a cost of $3000 or more, or else the shutters which, with the machinery for opening and closing them, cost nearly $2000, must be lost."

Thus these very men who in other places complain of my delay, now insinuate a censure that I had the plans for the dome shutters, pre-

pared "in the midst of the financial troubles of the country!" The work was going on at that time;—the plans for it had however been not only *directed*, but completed before the beginning of these financial troubles.—This work was taken up in its regular order, and in doing what I could in its behalf I was but complying with the request of the Managers.

The accusation that I improperly hurried the work upon the dome shutters—here only implied,—was broadly made in the Manifesto, as follows:

"It should be borne in mind that the dome will not be used until the Heliometer is finished, and that some three or four years interest might have been saved by deferring this costly experiment until the dome was needed."

And yet Mr. Olcott knew that the plan had been, to place in the dome the large telescope belonging to Hamilton College;—which was to have been hired until the college should find means to provide a clock and transit-instrument.

This project was warmly adopted by Dr. Armsby, who often assured me that there would be no difficulty in its execution,—and our plans were based upon this expectation. For instance, Dr. Armsby wrote me, 1856, Nov. 8, to inquire whether I would have

"Hodgins decide on the Heliometer piers, and go on at once with the cutting and placing, to be ready for the Hamilton College Equatorial?"

So, too,

1856, Nov. 12. "The Hamilton College Instrument can doubtless be had if desired."

1857, April 20. "The Hamilton College Instrument can come, *without one doubt*, if we want it."

It will be noticed that the price of the new dome, (for the need of which I am of course presented as to blame,) is here put down as $3,000 or more. My letter printed in the "Correspondence," states that Mr. Hodgins had reported the probable cost at between $1,500 and $2,000, probably about $1,800. This sum was also named by me in the private letter to Mr. Olcott, which the Accusers garble on page 131.—Their various and mutually inconsistent statements as to its expense have been exposed in § 122.

On page 69 the Accusers say that the original dome had cost $2000. But in the extract just given from page 137, they say it had cost $3000.—What financial inconsistencies for a man who has passed his life in a bank!

As to the flexible iron shutters, this happy thought was suggested by Mr. Hodgins, and after study of the subject fully approved by me.—They were, as stated by the Accusers, "unknown in any Observatory in the

world."—If constructed and erected according to the plans they would certainly have been attended with brilliant success.

As to their price, said by the Accusers to be "nearly $2000"—I do not know whether the statement is correct or not. They were furnished by the same Trustee who did the other iron-work for the Observatory. But I do know that *an offer* was made by a responsible firm in New York,—who wrote on the 29th of July, 1857, after full inspection of the plans, that they would

"undertake the job for the sum of one thousand and fifty dollars. It requires very nice work and perfect fitting and adjustment. We would have to personally superintend our men at Albany in putting it up. We include the shutters and all the shafting, gear, wheels, chains, pulleys, weights, &c., necessary to the perfect working of these shutters. We would like to commence it at once."

I think this subject of the shutters may now be considered as disposed of. If "the new dome must be built" "or else the shutters" "with the machinery for opening and closing them" "must be lost,"—how can this be made an accusation against me when the faulty dome which could not sustain *itself*, (let alone any superincumbent weight,) was built in 1853, two years or more before I ever saw the Dudley Observatory!

129. *The Chronograph.*

We find on pages 137 and 138 of the "Statement" the following language:

"Chronographs were deemed necessary for the Observatory. Such an instrument, the object of which is to record the exact time of making an observation, had been invented by the Messrs. Bond of Cambridge; but an instrument of their invention would not do for Dr. Gould, although in use by the Coast Survey. He must have something new. He accordingly set an artist of Boston at work to make a Chronograph, containing a new regulating principle. The experiment was a failure. It cost the Observatory $750.

A Chronograph is an instrument for determining and recording the instants of time at which a phenomenon occurs. The more perfect the instrument, the more accurate will be the observation. Such an instrument is now considered indispensable in most first class observatories.

The one employed by the Coast Survey was not invented by the Messrs. Bond. Those gentlemen have however added to it an ingenious arrangement called a "spring governor" by which the motion of the cylinder is rendered *nearly* uniform. Absolute uniformity is very desirable and I consider that it was my bounden duty to try to attain perfection in this as in every instrument intended for the Observatory. Mr. Farmer, a very eminent artist undertook with my sanction to construct a still better instrument than any which had been made. In this he was not successful, as I had hoped and anticipated; but the experiment was far from being a

failure; and the instrument is valuable and useful. Its cost was $252, and not $750 as the Accusers allege.

130. *Report to Council again.*

The subject of my Report of 1857, Dec. 21, to the Scientific Council,—the sneers and misstatements concerning which on pages 51 and 52 of the "Statement" have been already considered in § 70, p. 262 of this Detailed Refutation,—is brought up again by the Accusers on p. 138. I have nothing more to say about it than is given in § 70.

The Accusers here say of this Report:

"The communication seems to have been made with a view to put the Council in possession of Dr. Gould's version of the origin of the difficulties which had led to his dismissal, and the appointment of Dr. Peters."

It will be remarked, however, that this communication was presented to the Scientific Council 1857, Dec. 21; that no "dismissal" of any kind had then taken place; that none was even hinted at until 1858, June 4; and that Peters's alleged, but unreal, appointment as an observer occurred 1858, Jan. 9, three weeks subsequent to the presentation of this report.

If the ground is to be now taken that the *secret authority*, given by Mr. Olcott to Dr. Peters to remain in the Observatory after 1857, Dec. 1st, was a "*dismissal*" *of myself by the Trustees*,—how will the Accusers explain Mr. Olcott's six or eight applications to me during December, that *I* would appoint Peters an observer? Or will they deny it altogether? In the latter case how will they explain Mr. Olcott's letter of propositions to Prof. Bache 1857, Dec. 19?

The question as to how I could undergo dismissal, (p. 138) when I was not in office, (p. 146) except as a member of the Council, I leave for Judge Harris to decide.

131. *The Averment of the Trustees and the Certificates.*

Four pages (140–144) are devoted by the Accusers to an attempt to prove that I was the person responsible for the extravagance and reckless expenditures. And if they have succeeded in presenting a tolerably plausible *prima facie* case, still I solemnly assert that their declarations and allegations on this head, like those in other respects, are false and calumnious.

They say (p. 141):

"The Trustees, averring that all the expenditures at the Observatory, from the time Dr. Gould became connected with it, were made under his immediate direction, or with his concurrence and approbation, proceed to give what they regard as the most satisfactory evidence to support their own statements, and disprove those of Dr. Gould;"

and then give letters signed by Messrs. WM. HODGINS, W. W. HAGUE, B. F. SMITH, the Architect and Superintendents; and from one firm of carpenters, "Boardman and Waggoner," and one of masons, "W. and D. Turner," out of those who were employed upon the work.

A slight inspection of the certificates obtained from the Carpenters and Masons, and paraded in the "Statement," will show that they literally amount to nothing. They declare that they received instructions from *the Architects*, never from me. It is true, as one of the characteristic tricks of the Managers, that words are put into the mouths of these unsuspecting persons, which import that the Architects received and followed "instructions from Dr. Gould." But that was a matter of which these men neither knew, nor pretended to know, anything. What we have, then, from these respectable mechanics, and *all we have*, on the matter in issue, is that they followed the directions of the Architects. We shall soon see what the testimony of the 'Architects' amounts to. I need only refer here, as showing how easily honest workmen may be drawn into material error, to a sentence or two in the letter of Mr. Hodgins which is quoted below. Referring to the general statements of his former Certificate furnished to the Trustees, he says:

"I was far from desiring to say that no work was done which was not under such [his] supervision. For I am of course aware that *I was not the only person who gave orders to the builders, &c.*"

I have italicised a few words.

132. *The Architects' Certificates.*

The Accusers present certificates from Messrs. Hodgins, Hague and Smith. From the first I submit the following letter:

ALBANY, August 30th, 1858.

Dear Sir—In compliance with your wishes, I cheerfully give the explanation you ask for of my letter to the Trustees of the Dudley Observatory, dated January 18th; that letter being written in justification of myself against supposed imputations.

I did not intend to imply that the authorization given by you, to the changes in the west wing of the Observatory, *preceded* those changes; for I well remember the annoyance which the affair gave you; and that your directions concerning the subsequent arrangements were made to accommodate themselves to the demolition of the walls, which had *already* taken place, against your wishes. It would have been necessary to take down some portion of the wall, to introduce the piers, but not perhaps just then.

And while I endeavored, to the best of my ability, to carry out your wishes and plans; and while (as stated in my letter) the plans of all work done under my immediate supervision were submitted to you,—I was far from desiring to say that no work was done which was not under such supervision. For I am of course aware that I was not the only person who gave orders to the builders, &c. And in answer to your other inquiries, I would add that your plans from the beginning seemed to be based upon the most rigid economy compatible with a due regard to the proper execution of the work; and that you uniformly urged on me such economy in the designs you asked me to prepare.

The crane for placing the piers was a necessary contrivance, as acknowledged at the time, by others besides yourself. And it, as well as the machinery for the shutters, were, in my judgement, well adapted for their respective purposes, and by no means needlessly complicated.

I have the honor to be,
Very obediently your servant,
WILLIAM HODGINS.

Dr. B. A. GOULD, Jr.,
Dudley Observatory, Albany.

Mr. Hague is not now resident in this vicinity. He is represented in the "*Statement*" as "ARCHITECT AND ENGINEER." I supposed him to be merely an "overseer," or "clerk of works," according to Mr. Olcott's letter, of 1856, Nov. 5, which said that

"Mr. Hodgins will, as far as practicable, pass his orders through Mr. Hague, and he will see to their execution. He is not an architect, and will in no way interfere with, or vary the plans."

He was appointed by Dr. Armsby with my full concurrence, based upon Dr. Armsby's representations. He was removed by Dr. Armsby, with my approval,—also based upon such representations. Farther than the expression of this assent, I had no part in his dismissal; although I understand that Dr. Armsby has stated to him and his friends that it took place through my instrumentality, and has thus excited hostility to me on their part.

Mr. Hague's statement is this:

"Nothing was done by me, or by my orders, or under my supervision, without directions from Dr. Gould, nearly all of which were in writing, and copies of which are still in my possession, except in a single instance," &c.

Now it must be observed that the period of time covered by the service of Mr. Hodgins, as superintending architect, and Mr. Hague as overseer, and to which their certificates relate, began in the summer of 1856, and ended in March, 1857, when Mr. Smith came in to the work. A few extracts from letters written during, or in reference to this period, will go far towards clearing up the mystification which has been thrown around the subject:

From letters of Mr. Olcott.

1856, Nov. 5. "Dr. Armsby knows my opinion of Turner, and I consented to the changes as I could not credit the accounts without some responsible person to superintend and certify to their accuracy."

1857, Mar. 5. "The carpenter, Boardman, sends in a bill longer than the moral law, and not half as good, for about $2400, on which he has been paid all but $561." . . . . .

From my letters to Dr. Armsby.

1856, Nov. 2. "I have felt so much and so strongly that things were not in a good way that I had almost worked myself up to offer myself as Director until the buildings should be entirely completed, on condition that it be gratuitously, BUT WITH ENTIRE CONTROL. But I cannot do it. It would be frenzy to add to the already over-accumulated burdens saddled upon my back, for

three or four months at least, and I do not think there is any inducement which could take me willingly from here during the rest of the year; for these burdens *must* be shuffled off.

"But let me entreat you not to be rash in your steps; remember that you want a scientific, judiciously devised structure to meet wants only understood by astronomers and educated engineers to whom astronomers may have made these wants understood. The masons might build a Parthenon or a Capitol; but it would not be an Observatory. Any mason, any carpenter, any stone-cutter will answer; but there must be intellect and knowledge to guide them."*

1856, Nov. 13. "As to the recommended grading of the grounds, . . . I fear I am hardly in a position to give any advice of value. . . . Supposing economy to be an important consideration, and that other demands were much more pressing, I had always delayed the formation of any plans when the subject came up in my mind. Any necessary grading should precede the building of the fence; the location of the fence precede the grading;—and this location is assumed to be based upon some general plan and system for the grounds, buildings present and prospective, &c.; so that, not understanding these fundamental plans, I should be quite adrift in giving advice as to details."

From my letter to Mr. Olcott, 1857, *March* 10.

"How it was possible for Mr. Hague to set all instructions, both written and oral, so utterly at defiance, surpasses my comprehension.

"The present overhauling of accounts is, like the "actual cautery," far from agreeable, but eminently salutary in all respects. From Mr. Smith I have as yet heard nothing, but shall expect some information very soon as to the state of affairs."

These extracts are utterly at variance with the assumption of the Accusers, and undeniably contradict their assertions and their pretended proofs, "that all the expenditures at the Observatory, from the time Dr. Gould became connected with it, were made under his immediate direction."

After the dismissal of Mr. Hague, I exerted myself, at the request of the Managers, to obtain the services of some competent man as overseer. It was at this time that I undertook the experiment of keeping everything under my sole control and direction,—an experiment soon abandoned in despair. All my efforts failing, Mr. Olcott proposed the employment of Mr. B. F. Smith, to which of course I assented. He is a carpenter, who has undertaken the business of a house "architect," and has the reputation of honesty and of fair judgement to the extent of his limited education and knowledge of his profession. He was placed in charge of the details of the work, upon condition that no variation should be made from approved plans, that nothing should be done for which he had not written directions, and that he should report to me weekly at Cambridge. His duties began 1857, March 1,—and ceased at some time unknown to me; but he was still in service in April, 1858. Repeated instances of disobedience of instructions, and disregard of the conditions upon which he was appointed, led on my part to strong remonstrance with him, and to complaints to the Managers.

* In connection with this see my letter to Mr. Olcott, 1856, Nov. 8, (p. 268.)

In June, 1857, I became satisfied that my plans were systematically overridden by the Managers in their love of external show and glare. Discovering this, I soon dropped all communication with Smith, and all pretence of giving orders. His last report to me bears date 1857, June 20, and *my last instructions* to him 1857, July 10. He was in the service of the Trustees eight or nine months after that.

Notwithstanding the strong assertions in his published certificate to Mr. Olcott, Mr. Smith has on several occasions, acknowledged his disregard of orders, and confessed that Messrs. Olcott and Armsby were in the habit of overruling my instructions. This can readily be proved by ear-witnesses,—whom, however, I do not wish to drag unnecessarily before the public. It is no disparagement to Mr. Smith, who makes no pretence to education, to say that he was totally incapable of drawing up a letter in the finished form of that published under his name;—and I believe that it is owing to his want of acquaintance with the proper meaning and force of language that he was persuaded to give his signature to a statement so utterly at variance with the true state of the case. I have given Mr. Smith an opportunity to correct his own errors in a manner which would have been just to me, and not discreditable to him. After taking the matter into consideration for more than a week, he has finally declined to give any satisfactory certificate, and I am thus left to the necessity of vindicating myself in my own way.

The substance and point of Mr. Smith's testimony is found in the following sentences of his certificate; [p. 142 of the "Statement."]

"Nearly every expenditure incurred at the Observatory since my connection with it, has been authorized by Dr. Gould."

"All of the work on the Observatory from the time I entered on my duties as Architect and Superintendent until the present time, has been done by the authority and under the direction of Dr. Gould."

And in regard to the House, speaking of a personal interview, he says:

"I understood him to give a distinct approval, and directions to go on at once."

Now in the first place, it must be observed that Mr. Smith himself makes two not unimportant suggestions and admissions: 1st, He admits unspecified work done, *not under my direction*, and vaguely suggests that $100 might cover the amount; and 2nd, He admits that I had nothing whatever to do with building the gas-house. These admissions are in his certificate; I shall show greater ones still in his own letters. Before doing this, however, I must refer the reader to the fact, so often alluded to, and to which Mr. Hodgins now certifies (page 328), that the whole change of the West wing of the Observatory was not only not

made under my direction, but made against my will and my earnest remonstrances. That I acquiesced in the change, when I could not help myself, hardly affords ground for charging me with the responsibility of the expenses incurred by this folly.

I will now present a few brief extracts from Mr. Smith's letters to me—only remarking that while I change no words, I make some necessary literal corrections of his manuscript:

1857, March 7. "We must start right, or we are at sea with our compass. Mr. Olcott showed me a long bill of items of Mr. Boardman, over two thousand dollars, for which he said there was no vouchers, and he could not tell anything about it."

March 31. "In looking into the situation of everything, I find I am more at the mercy of two or three individuals than I was aware of when I wrote you. . . . . Therefore, you see Pruyn, Lansing and Boardman has the advantage of me. I must either pay them their price, or do worse. I think I shall have to do so."

May 4. "I want you to understand that I shall go according to my written instructions from you, so far as it is possible for me to do with the advice of Olcott and Armsby, in such minutias as making the road, &c."

May 30. "In relation to the building [the dwelling house] I have done as you desired. I have laid the whole subject before the Trustees, [Messrs. Olcott and Armsby I suppose] at a meeting appointed for that purpose, and after due consideration they have decided to change the location of the house. . . . .

"The Trustees have somewhat changed the plan of the building; first in the location; second in the material, which I think will be of brick. A few days will settle which."

June 30. . . . . "Nothing has transpired this week of importance, except I have made a contract for the gas-house, and the work is commenced. We set it in the same place that was excavated for the house last fall."

I shall now add a few extracts from my own letters, which cannot fail to show how utterly destitute of truth is the allegation of the Accusers—page 141, that "all the expenditures at the Observatory from the time Dr. Gould became connected with it, were made under his immediate direction, or with his concurrence and approbation." As a single item in this sweeping charge;—I was no more responsible for the dwelling house than for any other house built in Albany in the same period.

Mr. B. F. Smith:

Dear Sir—I have indirectly heard, what I trust may prove to be erroneous, that you have included the construction of the floor and platforms of the Circle-room in your arrangements with the carpenters. By reference to my letter of instructions, of Feb. 27, you will see that they are to form the subject of special and later directions.

And in general, I will repeat my caution relative to beginning no part of the work on the building without written and special instructions. A close adherence to this rule is the only security for the work going on correctly in my absence.

Very truly yours,

Cambridge, 185-; March 27. B. A. GOULD, Jr.

To Dr. Armsby, 1857, *April* 13.

"Mr. Smith always says he shall not do anything without orders, but if he has contracted for the floor and platform of the W. room, or has plastered the

E. room, what confidence can we have in promises. They are no great affairs, but there are better ways for the Observatory to spend even $100, than in doing what must be done over again."

To Mr. Olcott, 1857, *May* 20.

"From Mr. Smith I had the first of his promised weekly reports. He also sent the new plans he had been making for the dwelling-house, which are quite different from the former. I have, in my want of knowledge of these matters, taken the liberty of throwing the decision upon the Executive Committee, and sent him the list of my objections. But, as these relate merely to common matters of convenience and practical points, and I have given the whole grounds of my objections at length,—I thought you would excuse me for eluding the trouble and responsibility of deciding. If some one of you gentlemen will take charge of it, and decide what the plan shall be, Mr. S. can pass on immediately to the specifications and contract. . . . .

"And now that he [Smith] is in the traces, I know of nothing to prevent him from carrying on various parts of the work simultaneously. Complication is evidently a great trouble and difficulty to him; but I think we have succeeded in simplifying everything to its utmost. Perhaps when you see him it might be possible to let him understand that it is not contrary to his interest to hurry up the workmen, but that you are disposed to pay for work done, according to its amount, rather than according to the time it takes."

To Dr. Peters, 1857, *June* 17.

"When he [Smith] plastered the east wing, contrary to my written orders, the gas-pipes were put in. I think that Hague did it, but only know two things: 1st, that they were paid for; and 2d, that they were put in the wrong place. . . .

"Smith has no authority to do anything of any kind in the whole Observatory, without special instructions and precise written directions. He may make chalk-marks, but if he puts up the platforms on his own responsibility, and wrong, he ought to have to pay the bills."

The Accusers' policy of endeavoring to complicate the questions at issue by introducing petty matters of detail, finds here an admirable field. The eighteen letters of instruction which I wrote Mr. Smith between Feb. 27 and July 10, and my five or six personal interviews with him during the same interval, furnish an uninterrupted sequence of cautions to do nothing without orders, and of attempts to press him to a proper supervision and prompt execution of the work laid out for him. The personal interviews were on his part long-drawn apologies and expressions of regret at his acknowledged short comings.

The Accusers remark, p. 140:

"Neither Dr. Gould, nor the gentlemen who defend him, have ventured to specify a single case, in which Dr. Armsby or any other person has directed any expenditure to be made contrary to his instructions, or against his wishes."

It thus becomes desirable for me to specify a few of the items.

Messrs. Hawley and Aubin having generously given a complete gas-making apparatus, a showy edifice was erected to contain it under Dr. Armsby's directions and Smith's supervision,—at an expense, the interest of which I believe would have supplied the Observatory and Dwelling house with gas forever,—the whole actually without my official knowledge.

The site and plans of the dwelling house, and its style of construction, were in opposition to my known plans and wishes.

A complete dwelling was constructed in the basement of the Observatory building for the family of a former servant of Dr. Armsby;—the same persons who were continued in possession by the Executive Committee until May 1,—notwithstanding my known wishes to the contrary, and the known interference with the scientific operations.

From the beginning almost to the end, the work upon the West wing, (costing, the Accusers say, [p. 133,] "several thousand dollars") was done without instructions from me, and contrary to my known judgement. In this however, as in all other cases, it was my endeavor to adapt my course to circumstances,—and in the same way that, when the walls were torn down contrary to my remonstrances, I prepared, by request of Dr. Armsby, plans for the rebuilding; so when the room was lathed and plastered, and the floor and platforms laid for the sake of immediate exhibition to visiters,—though contrary to my orders, since it precluded the introduction of sundry devices for convenience and elegance, for which special directions were needed,—I contented myself with oral complaints, and with the abundant apologies and protestations which I received.

In the same way an expensive fence was erected entirely around the Observatory grounds by Dr. Armsby's directions, although for want of proper precautions, it is far from being upon the correct boundary line.

An expensive operation for "sloping the ground off beautifully" was undertaken by Dr. Armsby in the spring of 1857, contrary to my known wishes, and ended in the destruction of the only road which afforded a ready access from the city. Two or three weeks subsequent to the operation, Dr. Armsby sent me the not unexpected news "the new road has settled down six feet perpendicular." Apart from this destruction of the only convenient access for vehicles, the expense entailed must have amounted to a very considerable sum.

I might go on with details to show that the work within the Observatory building was as little in conformity with my instructions as that which I have already specified,—but it is unnecessary to fill up space with long lists of petty matters. I think that I have shown the total falsity of the sweeping and slanderous allegation of my Accusers that

"all the expenditures at the Observatory, [over $60,000, p. 81,] from the time Dr. Gould became connected with it, were under his immediate direction, or with his concurrence and approbation."

For the rest, suffice it to say that nearly, if not quite, half of all the work done in the Observatory-building, and almost the whole of that not within this building, was either not conformable to instructions, or

was commenced without instructions; while more important, but less showy, work was left to wait.

133. *The Dwelling House.*

Inasmuch as a dwelling house was built, it must of course be made the basis of some accusations against me. These seem to be the following:

1. That I did not like the plan or site, and have complained of it.

2. That I had plans and specifications drawn in Boston, after my own ideas.

3. That these were so badly contrived that they were necessarily rejected.

4. That the new plan was 'submitted to me, and discussed room by room,' and received my approval;—my allegation to the contrary being untrue.

To these I reply,

1. That the charge of disapproving the site and the alterations of the plan, is true, although I did not make many complaints, inasmuch as the faults were past remedy before I knew them, excepting those which I have myself endeavored to remedy during my occupancy; and, although my complaints were not of an ill-natured or censorious kind, toward the Managers, but had reference to the master-builder, Mr. Smith. That the house is badly built, and badly placed, is evident on the most cursory examination.—And I believe it cost from one-third to one-half more than it might.

2. That this is correct, the attendant trouble having been taken by me, *at Mr. Olcott's request.* I recommended a cheap and inconspicuous dwelling, built not for show, but for use and comfort, at a cost of about $4000. Plans of this kind were prepared by an architect in Boston, because I could be readily consulted there,—and were sent to Albany with my approval, but rejected by Dr. Armsby, because not sufficiently ornamental. He returned them with the request that they be made more showy and expensive. This was done, but the Managers were dissuaded from these plans by Mr. Smith, who thought he could prepare better ones.

3. The architect may speak for himself:

Boston, Dec. 31st, 1858.

Dr. B. A. Gould, Jr., Director of the Dudley Observatory:

Dear Sir—Understanding that you wish a written repetition of my observations concerning the letter of Mr. B. F. Smith, contained in the "Statement of the Trustees of the Dudley Observatory," I would therefore say: that my "plans and specifications," so far from being "inaccurate" and not to be comprehended "in a clear manner," were,—although constructed as simply and economically as possible, according to your request,—made with more than usual care and detail; and, as you may remember, were actually estimated upon by two responsible Boston mechanics, who found in them none of those incomprehensibilities which would seem to have discouraged "several of the best builders" of Albany.

Yours, respectfully,

W. HENRY WINSLOW.

4. Mr. Smith's memory and my own differ. He showed me some plans, to which, on a very cursory examination, I objected as not meeting the wants of the case. The whole of the interview lasted less than five minutes; and after returning to Cambridge I sent him my objections in a letter, referring him, however, to the Managers for their decision. They adopted his plans, and I was glad to be freed from the responsibility.

134. *Letters to Mr. Olcott and Dr. Armsby.*

To convict me of double dealing or insincerity, the Accusers introduce on page 145, the falsified extract previously given at the top of page 41 of the "Statement." This is exposed in § 51 of this Refutation. They also repeat an allusion to the subject of acknowledged "personal courtesies," a matter which I have discussed in § 49; and they refer again to the so-called "gratuity," as a contribution towards my "pretended loss in the publication of the Astronomical Journal,"—a topic which I have disposed of in § 50.

135. *The Directorship and Professorship in Columbia College again.*

On pages 146 and 147 my implacable and unscrupulous Accusers make, amid many sneers, the following assertions or intimations:

That the "office of Director" "had not been tendered" to me.
That I had unsuccessfully applied for a Professorship in Columbia College with a salary of $5000.
That the allusions of the Council to the intensity of personal spite which would sever me from the Meridian Circle ordered by me, according to my own plans, and mounted by me, chiefly at my own expense,—were an "affectation" of "romance and sentimentality."
That the Council's declaration that "'Dr. Gould is after Mrs. Dudley, the principal contributor to the Observatory,' by the devotion of his time, his talents, his thoughts and his labor," was untrue.
That my colleagues of the Council were unjust judges.

These several points have I think already met with all the discussion they need.

136. *Olcott Comet Again.*

The detection of the telescopic Comet, 1857, IV.,—the ridiculous and self-abasing, although successful, attempt of Dr. Peters to persuade Mr. Olcott that his name could be attached to it in sober earnest, and all the attendant sneers, have been sufficiently considered by me in § 52. The garbled extract from my letter is here repeated, p. 149, as also the false statement concerning the nomenclature, and the intimation that I was actuated by ignoble motives, when I

"felt constrained to strike out the name of Olcott, and call it the '*Fourth* Comet of 1857.'"

The misstatements have been exposed; the sneers may pass for what they are worth.

137. *General Pruyn's Drills.*

This matter is too small to dwell on farther. The whole facts have been already narrated. The Accusers say,—

"Dr. Gould, when settling for the work on the piers, refused to allow the charge for the tools."

It was not "when settling for the work on the piers." The bill was sent in long in advance of any other,—and was immediately, and as I think properly, inclosed to Mr. Olcott, who was then President, with inquiries as to my proper course. The letter was at once seized upon by Mr. Olcott as a weapon against me, was immediately exhibited by him to the individual concerned, and formed the incentive for Mr. Pruyn to visit the Observatory a day or two after, on May 21, and pick that quarrel with my assistants which was made the pretext for the insulting resolutions of May 22;—the resolutions which called forth my reply of May 31, on which the attempted "dismissal" was in fact based.

Mr. Pruyn's bill for the almost worthless tools was $103. The work was easily done with tools from another foundry, at the price of $15.

138. "*Inadvertence*" *of the Secretary.*

One of the illustrations of the annoyances by the Secretary of the Trustees, Dr. Armsby, is mentioned by the Council in the "Defence." § 13, where they rebut Mr. Olcott's false charge of "Gross and Deliberate Insults" and prefer a counter-charge against the President and Secretary of the Board.

The Accusers say "The facts are as follows," and then proceed to a misstatement as usual.

The appropriations, so often alluded to heretofore, had been passed by the Executive Committee, March 5, at their meeting convened upon my application, and the only one at which I was present. Notwithstanding several applications I did not obtain a certificate of these appropriations from the Secretary until March 9,—and even then the authority for casing the piers, and bringing the Calculating Engine into use was omitted. Under ordinary circumstances the fact, that I had heard the resolutions passed would have sufficed; but in this case I had been put upon my guard by previous occurrences. I finally applied on the 9th to Mr. Olcott for an official notice, and my worst fears were confirmed on receiving Dr. Armsby's communication of the same day; for *every one* of the four resolutions as sent differed from those which I had heard passed, in some way calculated to occasion me annoyance.

I made no allusion to this fact to Mr. Olcott; but wrote him a note the next morning upon another matter, and added the two paragraphs on

this subject which the Accusers have given on pages 153 and 154.—At night the supplemental letter of Dr. Armsby was received, containing these two resolutions of appropriation. And it is almost needless to say that these two were also changed from the form in which I can testify that I heard them passed.

As the Council truly said,—

"Such an omission by a Secretary might be called by a less mild term than inadvertence."

These letters may be found in the "Correspondence" pages 18, 19.

I will add the Accusers' version:

"The facts are as follows: On the 9th, in the afternoon, the Secretary sent copies to Dr. Gould of certain resolutions passed at a meeting three days previous, *at which Dr. Gould was present*, but omitted accidentally two resolutions also passed at the same meeting, relative to the Calculating Machine and Pier casings. On the morning of the 10th, discovering the omission, he sent a copy of the resolutions and an explanatory note to the Director."

It may not be out of place to add that some such delay generally occurred in transmitting any votes which it was important for me to know. It has been mentioned that I was not asked to attend the meetings of the Executive Committee.—On one occasion nineteen days elapsed between the passage of an appropriation and any information on the subject being officially or unofficially given to me.

139. *The Meridian Circle,—Dr. Brünnow.*

The Accusers on pages 154–156, engage in a labored effort to prove with the assistance of Dr. Brünnow of Ann Arbor, that I am not merely entitled to no credit for the Meridian Circle, but

"A bold, and, as the Trustees believe, a dishonest attempt has been made, to have credit awarded to Dr. Gould, in respect to this splendid instrument, to which he is not entitled."

The history and peculiarities of the Meridian circle have been made the subject of full discussion in the First Part of this Reply. Perhaps it may be desirable to repeat such of the points there set forth as are in opposition to this passage of the "Statement."

I did not go to Europe at my own instance. I did pay a considerable part of my expenses. I combined as far as possible the best features of the instruments which I had seen, and added others which were novel. It is unpleasant to have to speak of one's self in this way, but when such a false assault is made, the only mode of meeting it is by examining the particulars and showing their falsity. I gave minute directions to the makers and corresponded constantly relative to their execution. As soon after the instrument was received as means were furnished me, the preparations for mounting began, and at the very time when the Accusers assert "it lay

in its box," the Scientific Council actually saw it in its place, between the piers, and witnessed the movements of its reversal!

The Accusers say, sneeringly, of my order for this instrument:

"It has never been pretended that he gave any specific directions to the makers, as to any particular improvement, that he, in the exercise of his genius, had conceived. So far as the Trustees are able to learn, the only directions given were, that the instrument should contain every known improvement." (p. 155.)

These men talk of its containing "every known improvement," as though the instrument were like a house or household apparatus,—to which some patent "modern improvement" is continually added. They either do not, or will not, understand that, in general, each new instrument of this class differs from its predecessor; and that those variations which are deemed improvements by one astronomer may easily find disfavor with another. In their application of the words,—a "known improvement" is nonsensical, since by an "improvement" in an instrument we mean something not previously "known."

Before leaving America I told Mr. Olcott that I would be glad to introduce many peculiarities into the new instrument, but that I could not assume the responsibility without express authorization. This was immediately given;—and my letters to him and Dr. Armsby, from Europe, bear constant witness to the thought and study devoted to this end.

Even in the letter to Mr. Olcott, from which the Accusers quote on page 10,—a letter ten pages long, written from Berlin, 1855, Oct. 23, I gave a long account of the new principles which I had determined to have introduced, and of the difficulties with which I had to contend. I mentioned the long list of proposed changes, the warm sympathy of Professors Argelander and Encke, which had led them to give much of their valuable time to criticism of my plans, and the long interviews and discussions which I had with Mr. Martins, the artist.

In his letter of 1855, Nov. 12, informing me of the reception of this, Dr. Armsby wrote back:

"Nothing has pleased us so much as the zeal for new and improved appliances and modifications which you are manifesting, with so much hope and enthusiasm. With such encouragements we may well be sanguine for the future.

"The value of your present mission, in view of future success, cannot well be over-estimated. How important it is, and how fortunate for our enterprise, that you were able to go out and order in person, and direct the improvements and construction of the instruments!"

In order that the extract, on page 11, from my letter of 1855, Nov. 5, from Gotha, might not contradict their bare-faced assertion on page 155—my Accusers omitted in the second line the words which I italicise,

"and here, *as in the Meridian Circle*, the changes will be very great."

Even if this instrument merely combines the peculiarities of the best instruments of the best observatories of Europe, am I to be elaborately proved destitute of all credit for this? If it has peculiarities of its own, obtained by my responsibility, can an absence of merit be proved?

Since their own opinions upon such a subject would have no weight with the community, an application was made to Dr. Brünnow for a letter to Mr. Olcott, which they now publish. I have replied, in another place, to the scientific statement, contained in this letter.

Dr. Brünnow's remark, that the illumination of the field is similar to the arrangement of the Greenwich instrument, is correct so far as relates to the results obtained, and is incorrect so far as relates to means employed for its attainment.

His remark that he would himself "have proposed a different arrangement for reversing the telescope" would have been very proper in any other connection, but in the present one is easily understood.—I have no criticism to make, but differ from him in opinion, since the present arrangement is more convenient for use than any other which I can imagine.

Of this letter of Dr. Brünnow, with its flattery of Mr. Olcott, its unworthy endeavors to assail and injure one who had always been a friend (and, at least in one instance, a very serviceable one); its broad inaccuracies of statement and incorrectness of assertion,—I will say no more,—it has been sufficiently discussed on pages 133 and 166. The Accusers say of it that it "is admirable, both for the candor and the clearness of its statements." But their views of what is candid and admirable seldom agree with my own.

My object now is only to show that the expectant partisan is not an unprejudiced witness. Shortly after the publication of Mr. Olcott's attack upon me in June last, I addressed a letter to each of the six persons named by him as in hostile relations, not asking, as the Accusers assert of the one to Dr. Brünnow, any approval of my course at the Observatory, (for they could not know what this had been,) but simply inquiring whether my personal relations with them were such as Mr. Olcott asserted. I expected frank, manly and generous replies; for, even had the mutual relations not been cordial, noble natures would gladly avail themselves of such an opportunity to vindicate their own superiority to personal motives, and claim at once the universal brotherhood of science. In this expectation I have, in three instances, been disappointed. From one of the persons so addressed I received no answer. Another, lately my neighbor, replied with ill-concealed malice and an almost open avowal of personal hostility; and has since been

actively engaged in circulating the "Statement," and endeavoring to injure me in my native city. The reply of Dr. Brünnow, is *partially* published in the "Statement." A copy was furnished by him to Dr. Peters to be used against me, and the public is gravely informed that this copy "was given to the Trustees BY DR. PETERS, with *permission* to make it public!!" (p. 162.) I offer no comment upon this transaction; but may mention that the last sentence of the letter, referring to one of my past manifestations of friendship, is omitted in the published version; whether by Dr. Brünnow, Dr. Peters, or the Editor, I will not undertake to decide. This letter is farther discussed in §143.

140. *The gratuity to Messrs. Pistor and Martins.*

This matter is thoroughly set forth by the Council in §21 of the "Defence." The idea of founding an accusation against me upon the fact that I sent three hundred dollars, of my own earning, to the makers of the circle to compensate them for their loss in constructing the instrument, could not have been original with an honest man. The statement that Mr. Olcott

"wrote a letter expressing surprise and dissatisfaction that the unauthorized gift should have been made without the consent of the Board,"

is untrue. He did however show his animosity by a slip of temper, while he was by smiles and blandishments endeavoring to persuade me that my uniform kindness to him was accomplishing its work. That the Trustees had not appropriated any money for this purpose, and would not, Mr. Olcott well knew; as he also did, that the money was not sent "in behalf of the Board, by the Director" who was not allowed even pens, paper or ink for the business of the Observatory!

141. *The Gentleman from the West.*

The Accusers say, (pp. 157, 158):

"A very brief allusion is made in the Defence to 'the story of a gentleman from the West,' as it is called, and it is disposed of in the following manner:

'The story of the gentleman from the West, which is introduced by Mr. Olcott, has been traced, by the help of one of the Trustees, from its origin to its present form and we declare that it grew out of a single misconception, exaggerated until it took its present dimensions—reminding us of that trite history of exaggeration which each one will refer to at once for himself.'

"The 'story' was this: A gentleman from a western State, while in Albany, visited the Observatory, and conversed with Dr. Gould, who indulged in very gross abuse of the Trustees, and in representations respecting the Observatory, such as he had made in his letters to the Altona Journal. This is of importance only so far as it tends to prove, that Dr. Gould was really endeavoring to injure the Institution by misrepresentations, while professing a desire to promote its interests."

For the information of the signers of the "Statement,"—I will state that the "trite history" referred to by the Council was that of the "three

black crows," which previous to the publications of Mr. Olcott and his coadjutors passed as the best type of exaggeration.

I am happy to say that I have in my possession full and conclusive evidence on the subject from the gentleman alluded to, (whom I have never had the pleasure of seeing except on the occasion of his visit,)—and whom I will not draw into this controversy even by the publication of any part of his letter, unless the course of my Accusers renders it imperative.

The declaration will suffice, at present, that their assertions are thoroughly and wickedly untrue; and that I indulged in no abuse of the Trustees whatever. The gentleman was not alone, but accompanied by a resident of this city;—so that I have two witnesses.

142. *The Letters to Altona.*

On the 25th of January, 1858, in a letter to Prof. Peters, Editor of the *Astronomische Nachrichten* of Altona, announcing my proposed change of residence, I mentioned that the Coast Survey had lent to the Observatory the large transit-instrument. The letter was written in the German language and the expression which I used was "*zum Gebrauche überlassen.*" By a typographical error the word "*Gebrauche*" was printed "*Geschenke;*" so that I appeared as saying, what was of course intrinsically absurd, that the instrument had been *given* to the Observatory.

My attention was first drawn to this misprint by an offensive paragraph in an Albany evening paper,—communicated as I had reason to believe, through Dr. Armsby. In pursuance of my established policy of attempted conciliation, I took occasion to introduce the subject at my next interview with Mr. Olcott, treating it in a jocose way; and explained to him with pen and paper the nature of the mistake. I also wrote a short note to the editor of the newspaper stating that the misapprehension,—for such I chose to consider it,—was based upon a misprint. Finally I wrote to Altona again; directing Prof. Peters's attention to the subject in a letter, which, together with the correction, he published at once.

The Accusers now give, on page 159, a translation of the first letter, with the words of the original error, not only literally translated, but even italicised. And although they also give on page 113, an extract from the second letter, they omit to give the part which contains the correction.

From both letters they contrive to deduce accusations against me. The former is used to prove me guilty of falsehood, slander and unfaithfulness to the interests of the institution;—the latter furnishes the only basis for Mr. Olcott's charge of peculation.

Of the former, the Council say in the "Defence:"

"The matter of the letter to the Astronomical Journal of Altona, is shown to be a perfectly simple one, and to have in it not the first element of a charge against Dr. Gould."

And for saying this the Accusers now assail them, and insinuate that they were guilty of untruth.

143. *Dr. Gould's "Mental Habitudes," and "Unfriendly Relations with Astronomers."*

In his Manifesto, Mr. Olcott had made it one of the grounds of complaint against me, that although 'the Trustees' had hoped to secure for the Observatory "a national character, and as a means to this end, to co-operate in *harmonious* action with" other observatories, they found that my "personal relations" with American astronomers were "such as to preclude the hope of concert and co-operation with them."

To this the Council replied, by showing that the pages of my Astronomical Journal contained constant contributions from these very men.

The Accusers themselves now attempt, on pages 161–163, to convict Professors Henry, Bache and Peirce, of "evasion" and "unworthy and dishonorable deception," for making this defence. The charge had not been that these gentlemen did not like me, or that I did not like them; but it was that our personal relations precluded, not only concert and co-operation, but even the hope of it. The Council refuted the falsehood, by showing that such concert and co-operation actually existed at the time, thus confining themselves strictly to the point at issue.

The Accusers now say of the Council:

"The authors of this 'Defence' have not the poor excuse even of imagining that the feelings of the gentlemen they have named in their paragraph are friendly towards Dr. Gould. They put forth their pretence, in fact, in the face of *knowledge* to the contrary."

The attempt thus to found a charge of deception is very malignant.

I had never had, to my knowledge, any quarrel, controversy or dispute with any one of the persons named. With Prof. Mitchel, of Cincinnati, the Mitchells of Nantucket, and Dr. Brünnow, I stood in relations of friendship, never interrupted, so far as I was aware. With Commander Maury and the Messrs. Bond, of Cambridge, my acquaintance and relations were not intimate, and could not deserve the sacred name of friendship; but, on the other hand, no dispute of any kind existed between us. The statement insidiously inserted as a pretended illustration, in Dr. Brünnow's letter, (page 163) that a "rupture of all intercourse" existed between myself and these gentlemen, is a base untruth. We never met without a kindly greeting, and often interchanged letters; and I have evidence of the same in letters from the directors, both of the Washington and Cambridge Observatory, written since they saw Mr. Olcott's Manifesto.

The whole is part of the attempt to "crush," by rendering me odious, as a man of offensive and quarrelsome personal character.

Upon the publication of the first attack, I wrote at once to Prof. Mitchel and Dr. Brünnow, informing them of it, and fully expected from them an indignant denial of the false assertion. Prof. Mitchel never answered my letter; and Dr. Brünnow sent the one dated July 1, a mutilated copy of which is given on page 163 of the "Statement," as having been furnished for publication by Dr. Peters!

On June 24, two days before Mr. Olcott's presentation, June 26, of his Manifesto, I had received a very cordial, friendly letter from Dr. Brünnow, dated June 21!

To his very surprising letter of July 1, which began "*Dear Gould*," was filled with unkind remarks and untrue insinuations, and was signed "*Yours truly*, Brünnow,"—I replied, expressing my regret at his words and my conviction that he was laboring under misapprehension, my assurance that my "treatment of Peters" had always been kindly, and asking if he would not like to hear the other side of the case.

I quote from his answer, dated July 8:

"It is true that I had all of my information about the Peters affair from Peters, and some of the Albany papers, which were sent to us now and then by an unknown party. But it appeared to me that Peters has been abused and I could not help taking the side of the oppressed party, but that he is my fellow countryman had nothing to do with it."

"I shall read with great interest the statement of the other side, and it may be that I find that there were wrongs on both sides. I sincerely wish that my name had not been mixed up with the present deplorable affair, and I wish to have nothing to do with it."

"I suppose none of the Trustees know me except Dr. Armsby. From him I had a letter once, long before I knew of the present troubles, in which he asked me what arrangements we had made here for visiters, and what regulations exist in the European Observatories. I told him that on account of the curiosity which our Observatory excited, we were obliged to have it open to visiters one evening every week, but that since lately, as the arrangement interfered with the observations, we admit visiters only with my special permission. I wrote to him, too that the Berlin Observatory is shown to visiters every Wednesday and Saturday, from 9 to 11, A. M., but that for visits in the evening the special permission of Prof. Encke is required, and that I think similar arrangements exist in the other observatories.

As I know now why this request was made of me, I should think you might have satisfied the Trustees with similar regulations. I think myself you acted too rashly, and I doubt, too, whether the course adopted by the Scientific Council was the wisest for their interest."

Regarding the topics of this letter, I must make a few remarks:

1st. Although acknowledging that all his information had been received from Peters, and from the "unknown party," he is yet willing to declare a rupture of personal relations, and that the most favorable conclusion he can arrive at is: "it may be that I find that there were wrongs on both sides."

2d. Since the reception of this letter I have not communicated with Dr. Brünnow in any way except to send him such documents as may have been issued. Yet though he wished to have "nothing to do with" "the present deplorable affair," he wrote to Mr. Olcott July 31, that letter ["Statement," p. 155,] about the Meridian Circle, which I have already exposed.

3d. The Dudley Observatory had been uniformly exhibited to visiters at all hours, with the three exceptions heretofore detailed. So constant and burdensome had been the influx that I had myself defrayed the salary of an assistant, for the sole purpose of accompanying the multitude of strangers who came up asking to see the establishment. Dr. Brünnow thinks I "might have satisfied the Trustees with similar regulations" to his own; and that I "acted too rashly"!!

That Dr. Brünnow should so far forget his past relations with me as to adopt the side of his fellow countryman, without preferring to look into the case—and should then proceed to assail me without provocation, because espousing the cause of my opponents, certainly does not speak well for him; but it is no basis for a want of scientific co-operation. Whether I was right or wrong in a difference regarding Dr. Peters, makes no basis for hostile relations, such as Mr. Olcott asserted to exist, and which were contradicted by the facts themselves, at that time. No doubt this attack upon me will bring out secret enemies, if I have them, as open ones; but I regard this as a gain. If Dr. Brünnow chooses to range himself on that side, forgetful of the past—so be it.

144. *Confidential Letters.*

I have more than once alluded to the declaration of the Accusers on pages 163 and 164,

> "But in this statement, the Trustees have thought fit to confine themselves to matters relating directly to the Dudley Observatory, and have availed themselves only of such letters as are strictly of an official character, carefully abstaining from all reference to such as might by any possibility, be regarded as confidential."

And it is with difficulty that I restrain myself from characterizing this assertion by the short strong word which alone it merits. Not all the other assertions of my Accusers together have so astounded me as this one. No letter which I wrote to Mr. Olcott or to Dr. Armsby, prior to the 10th of January, 1858, was "of an official character." I was not Director until the arrangement of December, ratified on the 19th of Jan. 1858,—but simply a member of the Scientific Council. The Accusers carefully avoid noticing in any way my *official* correspondence with them excepting only the letter in which I firmly though courteously, protest against

the Observatory premises being made a public pleasure ground. My *official* correspondence has already been laid before the public in a separate pamphlet. All the alleged letters "to the Trustees"—from which they quote, save one, were private. Very many of them were marked "private" and "confidential," as my press-copies clearly show. The whole tone and style of my correspondence with Mr. Olcott and Dr. Armsby shows how far it was from being official. My letters were the free outpourings of friend to friend. In them I freely spoke of men and measures, relying on the supposed honor of those to whom I wrote. How vain that reliance! how misplaced that confidence which, as a young man, I felt in men much older than myself! Do men address *official* letters "My dear friend" and sign them "Affectionately yours?" I have given samples of my letters taken from the press-copies, which to the infinite confusion and dismay of Mr. Olcott and his coadjutors, I had preserved. Let the public judge whether they were or were not official. Yet I am not complaining of their publication so far as they relate to Observatory matters, but of their falsification and perversion. I am not ashamed of what I wrote, nor unwilling to see it paraded before the whole world when it pertains to any subject upon which publicity is pardonable. But I leave the burden and the disgrace where it belongs;—with those who have published correspondence marked "private" and "confidential;" who have garbled, distorted and falsified what they were in honor bound to hold sacred; and who now threaten to print and circulate all my remaining private notes and letters without reserve or restraint.

145. *Work Done.*

My Accusers say;

"The Council occupy three pages in a professed description of work done at the Observatory since January last. The object is to persuade the inexperienced reader into the belief that some important astronomical observations have really been made by Dr. Gould and his assistants. The Trustees are assured by competent astronomers that this claim is entirely baseless and ridiculous. To them, the statement of the Council carries its own refutation."

The "competent astronomer," cited by the Accusers, is Dr. C. H. F. Peters!! His letter speaks for itself.—So does the opinion of "the Trustees," regarding the Council's estimate of astronomical work. The work, which has been accomplished by myself and assistants, has been sufficiently set forth in Part I, chapter VI.

146. *Mr. Peters's opinion of Dr. Gould's work.*

The Accusers have set up a man of straw, in the hope that I will waste my strength in knocking him down. But I shall not.

147. *The Majority's Claims and Apologies.*

On pages 167 and 168, my Accusers continue:

"The Trustees have thus presented what they believe to be a fair and truthful history of their connection with the *four* gentlemen who are now in possession of the Dudley Observatory. They have endeavored to set forth, with a strict regard to their truthfulness, all the facts bearing upon this painful controversy. Much that has been said, they would gladly have omitted, were they not persuaded that justice, both to themselves and those with whom they are forced to contend, required that it *should* be said."

This paragraph requires no special discussion by me. After the expositions of this Reply, it may stand for what it is worth.

148. *The Refusal to Submit to Reference.*

A memorial to the Trustees, signed by Mrs. Dudley, General Van Rensselaer, and more than thirty other prominent donors, and to which the great majority of the remaining donors would undoubtedly have affixed their signatures, had opportunity been offered, was presented to the Trustees during the summer, asking them to refer the controversy to the following gentlemen,—

Rt. Rev. HORATIO POTTER,	New York.
President CHARLES KING,	Columbia College.
Ex-Governor WASHINGTON HUNT,	Lockport.
J. INGERSOLL BOWDITCH, Esq.,	Boston.
Hon. GULIAN C. VERPLANCK,	New York.

These gentlemen are citizens too prominent for me to presume to speak of their characters; the country knows them. As to their selection, I had neither share nor previous knowledge; with none of them had I communicated upon the subject, at the time; two of them I had not seen for some years; another I had met only on two occasions, both ceremonious;—and a fourth I knew to have been prepossessed against me by efforts from an unfriendly quarter.

Still there is no one of them to whom I myself would not then, and would not now, cheerfully submit the case.

To this proposition for reference the Accusers reply:

"The very statement of the question shows that it is not a fit subject of reference. It is equivalent to a submission of the question whether the Trustees shall abandon the Observatory and surrender their trust altogether.

This latter step was urged by Mrs. Dudley, in so many words, and was desired, as is well known, by the donors of probably two-thirds of the whole amount contributed.

And there is here a tacit admission,—a betrayal of a secret consciousness,—that the proposed investigation, by an impartial tribunal, could result in nothing short of the utter condemnation and overthrow of Mr. Olcott and his majority of Trustees.

APPENDIX.

(A.)

First Letter of the Scientific Council.

1856, Aug. 8.

THOMAS W. OLCOTT, Esq.

Dear Sir—The time has at length arrived when it becomes our duty to consider in what way the munificent investment which has been made in the Observatory shall be improved to its intended purpose. The generous appropriation for instruments has been most happily expended; and an astronomical apparatus of unrivaled perfection and completeness has been secured,—one which it will rejoice the heart of the observer merely to contemplate, and which has attracted to the Capital of your State the regards of the whole world of science. The care of this great treasure is a serious responsibility and a weight of trust, which cannot be honestly undertaken without a distinct perception of the possibility of its performance. After a careful and critical examination of the expenses of the establishment, we find that the Observatory cannot be creditably conducted for less than ten thousand dollars of annual outlay. The special details of the investigation are contained in the accompanying schedule, in which you will perceive that the *personnel* is reduced to its minimum in every respect, and that no farther reduction is in any way permissible. Rather than undertake the conduct of the Institution for a smaller sum of money, it would be decidedly advisable that the instruments should lie idle for a time in the company of too many noble telescopes of America. But, on the contrary, if the greatness of your giving can rise to this occasion, as it has to all our previous suggestions with such unflinching magnanimity, we promise you our earnest and hearty co-operation, and stake our reputations that the scientific success shall fill up the measure of your hopes and anticipations.

A. D. BACHE,
JOSEPH HENRY,
BENJAMIN PEIRCE,
B. A. GOULD, Jr.

(B.)

Mrs. Dudley's Letter read at the Inauguration.

ALBANY, August 14, 1856.

To the Trustees of the Dudley Observatory:

Gentlemen—I scarcely need refer, in a letter to you, to the modest beginning and gradual growth of the Institution over which you preside, and of which you are the responsible guardians. But we have arrived at a period in its history when its inauguration gives to it and to you some degree of prominence, and which must stamp our past efforts with weakness and inconsideration, or exalt those of the future, to the measure of liberality necessary to certain success. You have a building erected, and instruments engaged of unrivaled excellence, and it now remains to carry out the suggestion of the Astronomer Royal of England, in giving permanency to the establishment. The very distinguished Professors, Bache, Peirce and Gould, state in a letter which I have been permitted to see, that to expand this Institution to the wants of American Science, and the honors of a National character, will require an investment which will yield annually not less than $10,000. And these gentlemen say, in the letter referred to, "If the greatness of your giving can rise to this occasion, as it has to all our previous suggestions with such unflinching magnanimity, we promise you our earnest and hearty co-operation, and stake our reputations that the scientific success shall fill up the measure of your hopes and anticipations."

For the attainment of an object so rich in Scientific rewards and National glory, guaranteed by men with reputations as exalted and enduring as the skies upon

which they are written, contributions should be general, and not confined to an individual or a place.

For myself, I offer as my share of the required endowment, the sum of $50,000, in addition to the advances which I have already made; and, trusting that the name which you have given to the Observatory may not be considered as an undeserved compliment, and that it will not diminish the public regards, by giving to the Institution a seemingly individual character,

I remain, Gentlemen,
Your obedient servant,
BLANDINA DUDLEY.

(C.)

Mrs. Dudley to the Scientific Council.

ALBANY, June 9, 1858.

To. Profs. HENRY, BACHE, PEIRCE and GOULD,
Scientific Council of the Dudley Observatory:

Gentlemen—I need not inform you with what anxious interest I have watched your management of the scientific affairs of the Dudley Observatory, and the gratification with which I have seen its development under your skilful care, in spite of the embarrassments with which I am well aware you have been impeded.

As stated in my letter at the time of the Inauguration of the Observatory, my donation toward the requisite endowment was made upon the guaranty furnished by your names and reputations; and it has occasioned me deep regret to learn that your efforts are obstructed, and your plans thwarted, by individuals holding office in the Board of Trustees. It is my hope that the present officers of that Board may see the propriety of resigning, under these circumstances, and leaving their places to be filled by the votes of those Trustees who are not upon the present Executive Committee.

Thanking you for your unselfish devotion to the great enterprise which we all have so much at heart, I remain

Your obedient servant,
BLANDINA DUDLEY.

(D.)

Reply of the Scientific Council to Mrs. Dudley.

DUDLEY OBSERVATORY, 1858, June 30.

Mrs. BLANDINA DUDLEY:

Dear Madam—Your letter of June 9 was duly received; but we have delayed our reply, until, by farther personal examination of the condition of the Observatory, we should be enabled to speak without hesitation of the progress which had been made in carrying out the intentions of your noble gift.

We need not express our high gratification at learning how deeply you, as well as your relatives and personal friends, sympathize with us in our endeavors to fulfil the expectations justly entertained in consequence of the largeness of your donations, and the pledges heretofore given by the Trustees of the Observatory.

When we remembered the pomp and ceremony with which the Dudley Observatory was inaugurated as a national and scientific institution, and the promises under which your last great donation was obtained, we could not believe that the obstructions to which you allude would continue to exist.

We have made a careful examination of the present state of the Observatory, the progress which has been made in bringing its several parts into action, and the work already accomplished; and we can truly say, that we are not only satisfied with what Dr. Gould has already done, but are highly gratified with both the amount and character of the work. Not only has he made good progress in the equipment of the Observatory and mounting the instruments, but he has exhibited to us a series of investigations, now in progress, the results of which will be admitted to be an important addition to astronomical science.

On the receipt of your letter, we had already made arrangements for an early meeting in the city of Albany. We had been appealed to by the Board of Trustees, and determined to investigate carefully the difficulties which they might allege to exist, in the hope that, by good temper and disinterested effort on both sides, these might be removed. We could not believe that personal feeling would

be permitted to interfere with the execution of so sacred a trust. We have been met, on our arrival, by resolutions denying our power, dismissing from our Council one of its members, and the declaration that Dr. Gould must be removed as Director. The necessity for the removal of Dr. Gould was declared after the reading of a paper, containing grave charges against him as a man of science, and also as an honest man, and without giving the opportunity for a hearing or reply.

These charges we have investigated, and declare to you they are entirely baseless. After considering and asserting the moral rights which we regarded as belonging to our position as Council, we determined to offer measures of conciliation; to take charge of the Observatory ourselves; to submit the questions to arbitration; or to meet with a Committee of Conference, appointed by the Trustees. The President of the Board has refused to submit these propositions to the body to whom they were addressed, thus denying us also a hearing.

The most sacred rights of man are thus boldly trampled upon; and we can not but fear that our efforts to keep this Institution, which bears your honored name, in a condition of scientific progress, may even prove unavailing, unless public opinion should enforce upon the Trustees the necessity of the withdrawal to which you refer.

We shall continue to contest this matter with such powers as we possess, from our position as the Scientific Council of the Dudley Observatory. We feel that it may well excite your womanly sympathy—ever ready to rise against oppression—to see instruments, devised by a ripe and learned astronomer, wrested by violence from his use, or given into the hands of another; to blight all his hopes, and the zeal with which he was pursuing so successfully the advancement of his favorite science.

If the Trustees have failed, upon your call, to do what propriety and delicacy required, we have but little hope that they will listen to us, or that we shall be able to save the Institution from the results of their disorganizing measures; in which might is substituted for right, and by which a deserving, zealous, honorable man of science is arraigned and condemned without a hearing, and a so-called Council, whose only acknowledged power is to give advice, denied the opportunity to present it to the Trustees, unless it accord with the previous determination of the body which it is to advise.

The Trustees even undertake to decide, without hearing the Scientific Council which they created, upon the scientific character of the Director and the scientific operations of the Observatory; as if determined practically to ignore the existence of the Council, which they selected on the very ground that the Trustees themselves were not conversant with science.

This course, if persevered in, must assuredly be most disastrous to the best interests of the Institution. It substitutes the excited determinations of personal feeling and angry temper for the sober conclusions of reason; and, availing itself of its power, exercises it with the ungoverned energy of the uncivilized man, rather than with the sobriety and self-control and mildness of the Christian.

It remains to be seen whether, in our time and in our country, this will be tolerated.

Very respectfully, Dear Madam, yours,

JOSEPH HENRY,
A. D. BACHE,
BENJAMIN PEIRCE.

(E.)

Reply of the Majority to the Charge of Garbling.

The Trustees of the Dudley Observatory, having been publicly charged by Dr. B. A. Gould, Jr., with garbling certain letters written by him, in such a manner as to falsify and pervert his meaning, and with having fabricated one or more letters, and parts of letters, deem it proper to state that there is no more truth in these charges, than there was in any of the numerous false accusations made against them by the same party prior to the publication of their Statement.

While it is true that in some instances large portions of letters of very great length have been omitted, mainly for the sake of brevity; and in some other instances, through circumstances that will hereafter be explained, here and there a word has been accidentally changed, and some verbal inaccuracies have thus occurred, *it is entirely untrue that Dr. Gould's meaning has, in any case, been perverted; that any alteration, omission or addition has been made, in the slightest degree prejudicial to him or favorable to the case of the Trustees; or that any let-*

ter or sentence not actually written by Dr. Gould, and the original of which is not in their possession, has been published in their Statement.

The Trustees are aware that their own friends, and all who are personally acquainted with Dr. Gould, will need no assurance that the charges now made against them are without any foundation. To those of the public to whom all the parties to this controversy are unknown, the Trustees desire to say that they have a satisfactory explanation to give, of all the cases of pretended "garbling" which have as yet been cited. As additional charges and a more specific reply to their statements are promised, the Trustees withhold their answer to Dr. Gould's last pamphlet until that reply shall appear. At the proper moment these letters, *with all their contents,* may be given to the public.

In the meantime, the Trustees challenge Dr. Gould to specify the letter or letters, the whole or any part of which he never wrote. They will prove his allegations in this respect to be as destitute of truth, as they have already shown his statements to be, in other instances.

THOMAS W. OLCOTT,
IRA HARRIS.
WILLIAM H. DEWITT,
JOHN F. RATHBONE,
ALDEN MARCH,
SAMUEL H. RANSOM,
ISAAC W. VOSBURGH,
ROBERT H. PRUYN.
JAMES H. ARMSBY.

(F.)

Letter from John E. Gavit, Esq.

ALBANY, Oct. 9, 1858.

My dear Sir—I send you, with pleasure, answers to the four questions contained in your note of the 2d inst.

1. No account was ever presented to the Trustees of the Dudley Observatory, or to anybody else, for my travelling expenses in Europe. The sum of $750 was given me, in advance, towards meeting the cost of the expedition. My actual and necessary expenses exceeded this sum by more than one-third part, which excess, was defrayed by myself; and my time and services given gratuitously.

2. I undertook the journey as one of the Local Secretaries of the American Association for the Advancement of Science, in order to present in person certain invitations to eminent scientific men in Europe. On a former occasion I had been requested by Mr. T. W. Olcott to go to Europe in behalf of the Observatory, and had declined; but when invited to undertake this other highly honorable and gratifying mission, I could not refuse. My expedition was entirely independent of Mr. Spencer's, and would have been made, even had Mr. Spencer remained at home. But during most of the time we travelled together.

3. The barometers and thermometers, of which you make inquiry, were ordered by Mr. Olcott, and were purchased by Mr. Spencer, to whom he gave the money for the purpose. I understood that the recommendation of the maker came from you; but I myself never had any communication with you; written or oral, concerning the purchase.

4. Both Mr. Spencer and myself made great efforts to carry these instruments with us through England; but it proved a matter of great difficulty on account of the Custom House regulations. We went so far as to apply to the American Minister in Paris for some aid in this respect, but unsuccessfully. I remained for this purpose in Paris for some days, while Mr. Spencer went to Oxford. Finally it was found necessary to send them from Havre to New York, but I caused them to be insured by the Express Co. against injury. They were consigned to the "Trustees of the Dudley Observatory," with whom was the duty of recovering the insurance due. The boxes were opened in the presence of some of the Trustees, who saw how much breakage had occurred.

Very sincerely yours,
JOHN E. GAVIT.

Dr B. A. Gould, Jr.,
Director of the Dudley Observatory.

(G.)

Letter from Charles A. Spencer, Esq.

CANASTOTA, Nov. 2, 1858.

Dr. B. A. Gould:

Dear Sir—Your favor of the 29th ultimo, making inquiries in reference to matters concerning the Dudley Observatory, is at hand. I have perhaps too sanguinely indulged the hope that there might not be any occasion which should call

for the use of my name in the painful controversy between the Trustees, and yourself and the late Scientific Council. I long since determined that I would in no event indulge in any partisan feeling in relation thereto. My personal relations to all have been, so far as I am aware, of the most friendly character, and I have no desire to change or destroy them. Such being my determination, I do not feel called upon to make any statement in relation to facts within my knowledge which shall call for any expression of opinion for or against either of the parties; whilst at the same time I feel the obligation which your letter has imposed, of replying to your inquiries so far as my remembrance of the facts may enable me to do so, respecting my past relations to yourself and to the Trustees.

To your first inquiry I reply:—That having had no connection with the Observatory at the time mentioned, I know nothing whatever of Mrs. Dudley having raised her subscription from $6,000 to $14,000, prior to your departure for Europe.

As far as I can recall the facts in relation to the Heliometer, they are briefly these:—After your return from Europe I one day received a visit from you at Canastota; on which occasion you were accompanied by Dr. Armsby, Mr. Gavit, and Mr. Baker. This was the first time I had the pleasure of meeting you, or of making your acquaintance. On the pressing invitation of Dr. Armsby and yourself, I returned with you to Albany, and remained there until 6 o'clock P. M. of the ensuing day. Our conversation on the way to Albany and during a few hours of the next day was a somewhat earnest discussion of Heliometers and other astronomical instruments. I did not at the time suppose that our interviews had any relation to the construction of the Dudley Heliometer by myself; having been led to suppose—whether erroneously or not I cannot say—by my conversation with Dr. Armsby that your prepossessions in favor of the Messrs. Repsold, were too strong to be overcome. Neglecting a somewhat pressing and repeated invitation to remain and attend a party at Mrs. Dudley's, on the evening of the second day referred to, I returned home by the 6 o'clock P, M. train.

A day or two after my return I received a letter from yourself informing me that the making of the Heliometer had been intrusted to me, and requesting me to prepare estimates of such sizes as I would be willing to make. This estimate I made out and sent to Mr. Olcott, I believe. In making these estimates I was requested to add to the price of each of the sizes named, the sum of seven hundred and fifty dollars; this last sum being the estimated cost of a trip to Europe to study the Heliometer and other instruments in the foreign workshops and Observatories.—Shortly after sending the estimates I was informed that Mrs. Dudley had chosen the Heliometer of highest price on my list, namely, the one for which, with the seven hundred and fifty dollars added the proposed cost was to be $14,500.—Previous to the acceptance of the last price named, I knew of no sum having been given for the purchase of a Heliometer save that, mentioned in the newspapers of the time, of $6,000, as having been given by Mrs. Dudley for that purpose. During your absence in Europe, I remember having been permitted to read a letter of yours to Mr. Olcott, written at Gotha (the date I do not remember) in which you stated that Repsold's prices were so much more than the anticipated $6,000 that you declined to take the responsibility of ordering the Heliometer from them before consulting with the Trustees or friends of the Observatory. In that letter you gave a list of prices of the different sizes, you had proposed, and stated that the Repsolds had declined to make an instrument with an object-glass larger than nine inches in diameter on any terms.

As to my expenses to Europe, it was assumed that the seven hundred and fifty dollars mentioned would cover them; and no other account was made of them to the Trustees by me.

I cannot now remember by whom the order for barometer and thermometers was given to me. I can only recall the fact that these instruments were several times mentioned in conversation with Dr. Armsby, Mr. Olcott and yourself, and just prior to my departure, I received from Mr. Olcott a draft on New-York for the estimated expenses of Mr. Gavit and myself, together with the proposed cost of these last named instruments. The sum added for this purpose was $150. I took upon myself the charge of procuring the instruments—having previously received from you the needful information as to the best makers, &c. Upon my first arrival in Paris, I left the order with Fastré, on the condition that the instruments were to be completed in two weeks time, and on my return to Paris from Germany. I did not again reach Paris until three weeks had elapsed, and found two thermometers completed—the barometer being untouched. As the period of my stay in Paris was limited to a very few days, I declined having anything further to do in relation to the matter; and at his request delegated my authority to Mr. Gavit, who was to remain in Paris for some days longer than myself.

I understood that Mr. Gavit went to Europe as the Local Secretary of the American Association for the Advancement of Science, and that as such officer he was charged with the duty of arranging the free passages of such distinguished European savans as should accept of the invitation of the Association to attend its then next meeting. That Mr. Gavit devoted himself to the duty I am fully aware, as my aid was required on several occasions to despatch the invitations in such season as should allow of the requisite preparations for such a voyage. Before my own decision was made to go to Europe, I remember to have heard that Mr Gavit would do so, whether I accompanied him or not. My memory of this fact is the clearer from the great surprise I felt at the time. Not being then aware of his appointment as Secretary of the Association, it seemed to me very singular that the Observatory should send him out to examine instruments and observatories.

I am not aware that the "non completion of the Heliometer is due to any negligence or want of attention" on your part. I cannot, of course, judge of the kind or measure of responsibility which others may believe to rest upon you in relation to the instrument, and can only say that, so far as my own knowledge extends you are not "to blame for such delay as may have occurred."

To give a full detail of matters pertaining to the Heliometer would extend this reply to unreasonable length, and might in some respects perhaps be deemed a violation of implied confidence. I will only venture a few words therefore in reference to the matter of delay, &c. Mr. Johnson—who, according to the Radcliffe observations, had awaited the completion of the celebrated Oxford Heliometer eight or nine years after the order for it was given—gave me as his emphatic parting advice, that I would not permit myself to be urged into any haste by any influences whatever; but urged me to devote ample time to a thorough investigation and study of the instrument, with a view to overcome its known defects. The same advice was urged by Argelander; whose experience with one of the largest of the Fraunhofer Heliometers only added convincing weight to his opinion. Such was, in a word, the uniform tenor of the counsel I received from the distinguished astronomers of Europe.

Repsold could justly urge in full excuse for his long delay, that the instrument he had designed was greatly different in construction from any before made; and as my own proposed form was likewise a wide departure from any yet known, I felt that the greater was the necessity for ample investigation. If apparently needless delay of the Dudley Heliometer has occurred, it seems to me that the last change proposed in the construction would compensate for it an hundred fold. As you are aware, serious defects seemed to belong to the very nature of the instrument and although some of the more important of these were overcome in the construction first devised by me, yet enough remained to leave a feeling of dissatisfaction and regret, as well as to stimulate exertion. And it is because the instrument in the last perfected form is free from these defects, and is clothed with new powers in the delicacy and perfection of its measurements, that I am led to doubt if an hour of delay has occurred that may not be looked upon as fortunate.

I have now replied, I believe, to your inquiries, as fully as is desirable, and have only to regret the painful occasion which has given rise to this letter.

I am, very respectfully, yours,

CH. A. SPENCER.

(II.)

Circular Address of 1859, *Jan.* 5.

To the Donors and Friends of the Dudley Observatory.

A new phase in the affairs of the Institution has presented itself: On Monday afternoon, January third, a force of about fifteen men, acting under written directions from Thomas W. Olcott, President of the Board of Trustees, but without any legal or judicial authority, presented themselves at the Observatory premises during my temporary absence, entered my dwelling house, then occupied by my assistants and servants, and broke into the Observatory building. They declared that they had come to turn out the present occupants; that they should do so by whatever force might be found necessary, and should take the exclusive possession themselves. They remained in the house during the night, having a supply of liquor, and exercising the rule of brute force and mob law, over the premises. Mr Olcott and Dr. Armsby visited the marauders during the evening.

It is necessary that I should state the circumstances under which I took possession and have continued in occupation of the premises, in order that those interested in the Observatory and the public at large may understand the true charac-

ter of this crowning act of lawlessness and violence on the part of Mr. Olcott; an act which, by taking the law into his own hands, and setting its authority, its courts, its ministers and the public peace at defiance, fitly consummates a course of conduct, unparalleled as I suppose on the records of civilized life.

On the 19th of December, 1857, Mr. Olcott, acting with the authority and in behalf of the Trustees of the Observatory, submitted in writing to Prof. Bache in behalf of the Scientific Council of the Observatory, a distinct and definite proposition, made to me orally on the day previous, regarding the possession and future administration of the Observatory for all scientific purposes.

This proposition was, that I should take up my residence in Albany with assistants to be appointed by Prof. Bache or myself, "to take the entire charge of the Observatory," . . . . "and under the Scientific Council to be responsible for the scientific character of the Institution."

The Trustees would furnish means "for mounting the instruments, and furnishing the indispensible equipments," while my services and the services of my assistants were to be furnished gratuitously, so long as the only tangible endowment fund,—the gift of $50,000 from Mrs. Dudley—remained, as it then was and would be for some two years, unavailable for income.

When I add, that—since the only assistants I could bring with me were, as well as myself, employees of the U. S. Coast Survey, and since that service was to continue with unchanging duties at our new station in the Observatory, just as it had been performed at our previous station, in Cambridge, as our sole dependence for earning our subsistence—the time and services which we could bestow upon the proper work of the Observatory were perfectly understood to be such only as we could give without interfering with or interrupting our daily labor in the former employment, the whole proposition of Mr. Olcott will be intelligibly before the reader.

This Proposition, thus made *in writing*, was promptly accepted *in writing* by Prof. Bache in behalf of the Scientific Council; and was as promptly accepted by me in person. It was accepted without modification or condition; and both parties proceeded immediately to act upon it.

Thus made in writing and accepted in writing as well as orally, this proposition of Mr. Olcott formed a compact. No more solemn, no more complete agreement was ever made between parties competent to contract. If anything more could possibly be needed to give it binding force and effect, it certainly received all needed sanction when the Board of Trustees, on January 19, 1858, formally ratified the compact by a resolution referring in express terms to Mr. Olcott's Proposition, as its only basis.

It was under this Compact that I took possession of the Observatory and premises, on February 20th, 1858; and under this that I have continued in possession, and in the faithful discharge of all my duties to the Institution, down to the present time.

Under this compact, I was in no sense an appointee, officer or servant of the Trustees. No such relation existed. I was neither hired by them, nor paid by them; and by the express terms of the agreement, they had no authority or control over me, in the discharge of my undertaking to conduct the scientific operations of the Observatory. The buildings and instruments, and the grounds for all purposes within the scope of my undertaking, passed absolutely from the possession of the Trustees to mine, for myself and the Scientific Council, with only such reasonable right of access and admission reserved to the Trustees as might be necessary for the proper performance of their appropriate and reserved duties, as general conservators and financial agents of the Observatory.

The compact, by the plainest terms and intent, (making the best disposition of the Institution possible, in its condition of embarrassed finances and utter want of adequate or available endowment,) passed over and transferred the scientific operations of the Observatory to the charge of those who were willing, and I may add competent, to take charge of it, without compensation for their services, and for the benefit of science alone. Of sheer necessity as well as by the terms of the agreement, the Observatory premises were also transferred to them at the same time. I was to conduct the Institution, as the Resident Astronomer, accountable for the manner of conducting it to nobody except the Scientific Council. For this purpose full possession was given to me;—a possession exclusive of all the world, not excepting the Trustees, to the full extent requisite for the complete performance of my undertaking and that of the Council, as those to whom the Observatory had for this purpose been assigned.

Such was the Compact under which my possession of the Observatory commenced and has been maintained. This is not my opinion alone, but that of the Albany

legal counsel. And the Donors and friends of the Observatory, and the public, will hence be able to understand on what ground of legal right it is that I have stood to my post in the premises for the last six months in spite of the illegal and unwarrantable attempts made by Mr. Olcott and his Majority of Trustees, without cause or color of justice, to trample their own solemn compact under foot, to treat me as if I had been merely their hired official or servant, and thus affect to dismiss me from their service. This is a point which I am told many of my friends and the public have not understood. They will, I trust understand it now and hereafter.

But, while this presents the legal ground of my continued possession of the Observatory, it is due to myself to add the grounds of moral principle and obligation under which I have acted.

I have maintained possession under the same impulse which induced me originally to contribute gratuitous labor, for more than two years, to the work of preparing the Dudley Observatory for scientific usefulness; and then to accept Mr. Olcott's Proposition to take it into my keeping, give my time and services gratuitously, and contribute my money to the amount of several thousand dollars, to complete its preparations and conduct its operations. That impulse sprung from my love of the science to which my life is dedicated; from the belief that the Dudley Observatory was, in its success or downfall, to exercise an important influence over the progress of science in my native land; from my assured conviction that with its instruments containing advances over previous ones, the Observatory would be so prepared and so used as to mark an era in Astronomical Science; and finally and chiefly, from a strong sense of plighted obligation to the generous Donors, whose gifts, in many of the most important instances, had been bestowed upon the faith and declaration that the Observatory would be under the full scientific control of the members of the Scientific Council.

But upon all this I do not dwell. The time has now come, when without fault of mine I am forced to abandon the Observatory to its fate. I have not been driven from my post even by persecutions so groundless, so wicked and so brutal, that I do not believe their equal can be found in our times. I have awaited, amid steady, unremitted and successful astronomical labors any legal action which Mr. Olcott and his supporters might see fit to institute for testing the question of legal rights. No such proceeding has ever been instituted—although statements to the contrary have been published through the daily press. Mr. Olcott has not appealed to the law. He has treated the law as he had already treated his own legal compact,—trampled it under his feet. What things may be sacred with him, Heaven may know.—Compacts are not; law is not; justice is not; truth is not. As for truth, I will refer to my reply to his attacks upon me, which is now nearly ready for the press. As for law, he has deliberately proceeded to substitute brute force in its place; he has organized a mob, a band of irresponsible rioters, and deliberately given them instructions to insult the law and to commit open violence and breach of the peace. And they have executed his behests.

He has waited for this demonstration until the dead of winter. He chooses this inclement season to employ a mob to turn me and my assistants into the street. He arrests our scientific labors at a moment's notice, and so abruptly as to render useless the long and earnest toils of many weeks. He separates me by force, not only from the instruments belonging to the Observatory but from my charge of the valuable and delicately adjusted instruments and apparatus belonging to the United States Coast Survey, and from the Coast Survey building and station in the Observatory inclosure. The premises were visited yesterday, the 4th of January, by Mr. Olcott, Dr. Armsby and Judge Harris, with a view to insist upon and enforce Mr. Olcott's orders for the violent expulsion of myself and my assistants from the dwelling we occupied.

I was absent at the time, engaged with my counsel and in consultation with friends; and, before I could return, my assistants had been ejected from the dwelling house, by violence, and information conveyed to me that I should not be allowed to enter the house or Observatory again. The house contained the furniture provided and paid for by me, my entire wardrobe and that of my assistants, a large number of computations, almost all my private and official papers, and my library of some 3,000 volumes.

The books containing my press-copies of letters written, and the letters written me by Mr. Olcott and Dr. Armsby, during the years 1855, 1856 and 1857, had been removed at the first indication of violence.

I have yielded to the force and violence of mob law, although I could have met force with force. I could have had any number of persons, respectable in themselves and led by respectable men, ready and able to prevent my expulsion or to

continue me in possession. Had I deemed such a course advisable, it needed but a word, and Mr. Olcott, with his band of marauders, would have been swept from the place. My counsel have advised me that to overcome Mr. Olcott's force by a superior one, would be as justifiable in law as in reason, but it is not for me to abet or countenance civil commotions, riot or bloodshed.

I might resort to legal process for redress for the violence to which I have been subjected, and with the certainty, if any semblance of justice still dwells in the land, of being eventually restored to the rightful possession of the Observatory; but it would be possible for my persecutors to keep the final decision long in abeyance, and of course to keep me equally long away from the Observatory and its instruments.

Under these circumstances, and with the advice of many friends, I have submitted to a stern necessity. My present connection with the Observatory is ended, and with it all the hopes for science that I have so long built upon an Astronomical Institution which I would fain have made, and could have made, one of the foremost and noblest in the world. Yet I trust its donors and friends will remember, and forever bear me witness, that I have not deserted my post, but have been driven from it only by the exhibition of lawless force.

It belongs to others to vindicate the character of the city of Albany from the reproach of such scenes of riot and violence as have been enacted in this case under the lead of men calling themselves respectable.

And it now remains for the Donors to the Dudley Observatory, to take such steps as they may deem best, to rescue it, by judicial or legislative interposition, or both, from the unworthy and ruinous hands into which it has fallen. They should at least ask the Legislature to break up the close corporation which, in the person of one man, has heretofore controlled the Institution; to give the Donors some voice in the election of its legal guardians, or to place it under some proper and respectable authority.

Pressed, and almost prostrated, as I have been by my various and unavoidable duties and labors, it has been impossible to devote more than snatches of time to the preparation of my Reply to the infamous attacks of which I have been made the object. The labor of preparing it has been immense; the public will see well enough why, when it shall appear. But it will come, if God spares me a little longer. It will be put to press in a few days—although of course delayed a little by the confusion into which my papers and affairs are now thrown.

It will be long,—a fault not mine, but that of my implacable and reckless enemies, and for which there is no remedy. To that reply I refer my friends and the public for the full vindication of all that I have, or expect to have, on this earth, of reputation or character among my fellow men. If men will read it, I have no fears for the result. So surely as God is just, and has taught men to reverence truth and justice, I shall come out of this painful and disgraceful controversy, this terrible ordeal, unscathed and justified; while, in the inevitable process of self-defence, my accusers and persecutors will stand forever convicted before the world of a long series and an accumulated record of the basest and most dangerous crimes, not punishable by the law, which it is possible for men to commit in a civilized and Christian community; and implying a depth of moral depravity which it is shocking to contemplate.

By the judgement of those who will do me the justice to read this reply, and by the action of the Donors (whose rights have been denied,) I am content to abide. I shall strengthen the plain truth by incontrovertible proofs; and if it falls heavily upon those who have wantonly sought to destroy me, I can only say that the quarrel was not of my seeking, and that the shame must rest upon those who began and continued it to this bitter end.

I have taken a house in Albany for myself and my assistants, where our labors in the Coast Survey service may be continued, and shall, to the best of my ability, endeavor to protect the interests of the Government in the preservation of the instruments, apparatus and other property of the Coast Survey.

Very respectfully,

B. A. GOULD, Jr.

Albany, 1859. January 5.

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